

THE
CONTRACT JOURNAL
INCORPORATING

THE BRITISH CONSTRUCTIONAL ENGINEER AND THE CONTRACTOR

No. 4,208 81st YEAR

THURSDAY, FEBRUARY 18, 1960

PRICE 2/-



ROSS By-pass and Ross Tewkesbury Motorway (Contract No. 1) by courtesy of Tarmac Civil Engineering Ltd.

County Surveyor: D. H. Banks, M.B.E. T.D., B.Sc., A.M.I.C.E.



ON BRITAIN'S MOTORWAYS

INTERNATIONAL Construction Equipment
plays its part.

*To complete the construction of MOTORWAYS
on schedule contractors depend upon efficient
INTERNATIONAL Tractors and equipment.*

SALES and SERVICE by

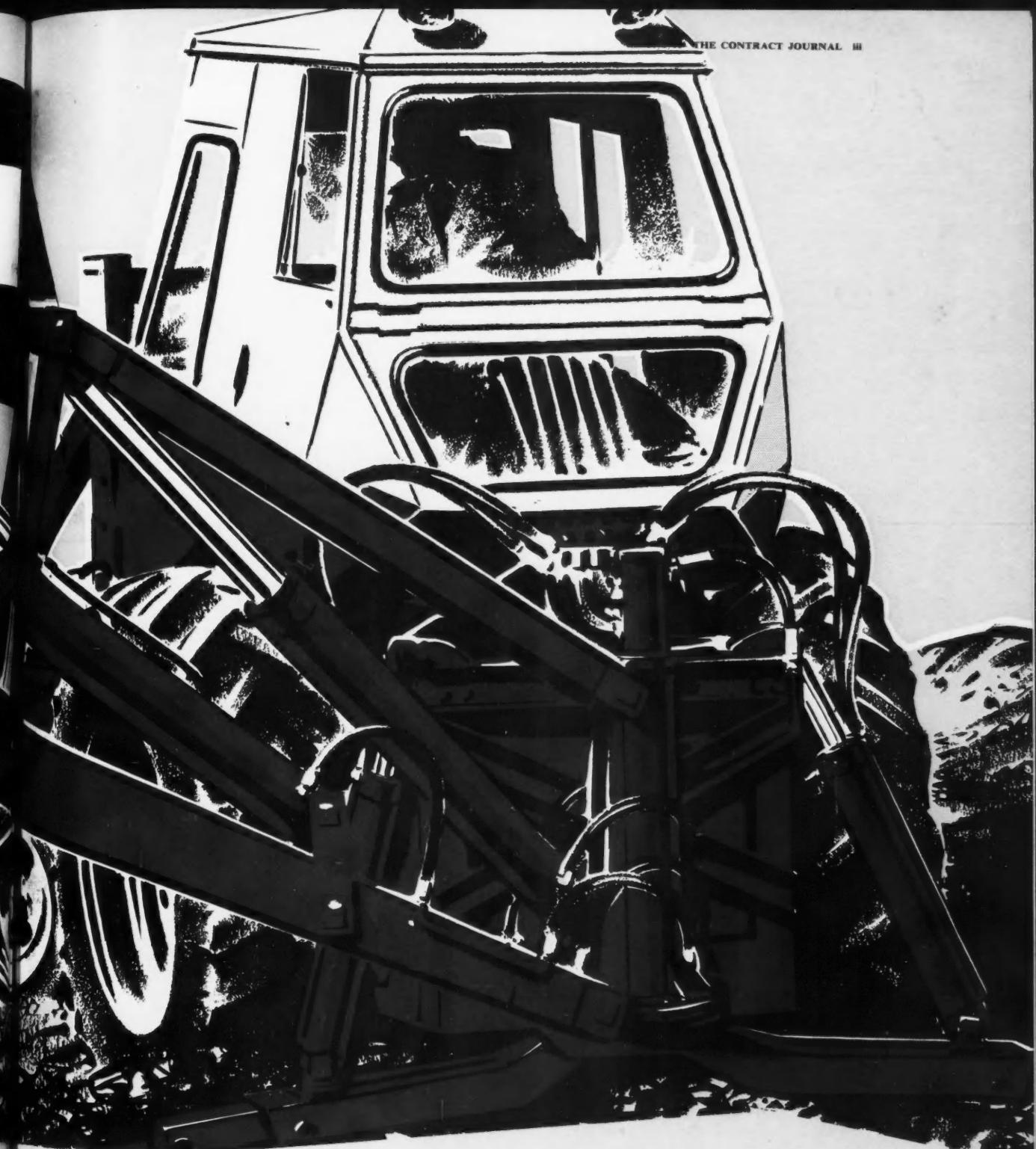
SAVILLE (TRACTORS) LIMITED

(A Company of the Lumley-Saville Organisation)

LONDON • STRATFORD-ON-AVON • NEWCASTLE-UPON-TYNE
BELFAST • J. H. SAVILLE & CO. LTD. DUBLIN

DINKUM MAJOR





POWER

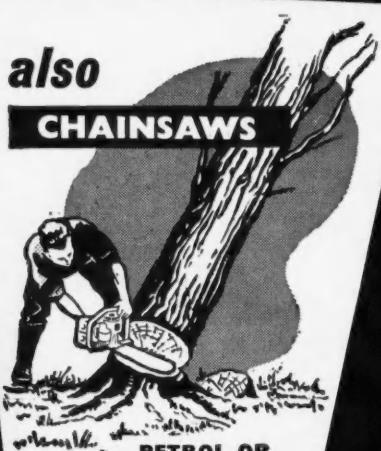
WHITLOCK BROS LIMITED · GREAT YELDHAM · ESSEX · Telephone: Gt.Yeldham 305 (8 lines)

COMPRESSORS FOR HIRE

- *Mobile*
- *Portable*
- *Stationary*
- *Diesel and Electric*
- *18 to 630 cu. ft. f.a.d.*

also

CHAINSAWS



PETROL OR
PNEUMATIC

CONTACT US FOR SERVICE

CONTRACTORS SERVICES LTD

65 EFFRA ROAD, LONDON S.W.2

TELEPHONE BRIXTON 4081

The TOP name in BLACK-TOP PLANTS



A Parker 'Starmix' 40 —
one of seven Parker
Black-Top plants used on
the London-Birmingham
Motorway.

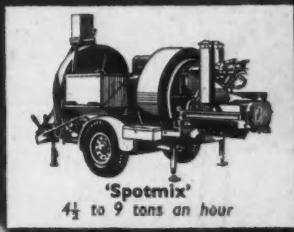
PARKER

ASPHALT & TARMACADAM PLANTS

FIXED OR MOBILE



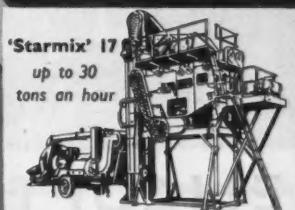
'Starmix' 39
up to 77 tons an hour



'Spotmix'
4½ to 9 tons an hour



'Starmix' 40
up to 200 tons an hour



'Starmix' 17
up to 30
tons an hour

Top producers choose Parker —
the top name in Black-Top Plants
for every need. Parkers offer the
most modern range, fixed or
mobile, for any type of production
at outputs up to 200 tons an hour.
Features essential for mixing high
quality material at lowest cost are
common to all models. Parkers latest
developments — 'Synchronmix' mixing
technique — 'Hy-way' Oil Heater —
'Parkermatic' pneumatic control — are
now standard on most Parker plants.

All Parker Plant is backed by the Parker
world-wide Service organisation.

FREDERICK PARKER LIMITED
VIADUCT WORKS • LEICESTER
Phones: Leicester 62531 (10 lines)

London: Stafford House, Norfolk Street, W.C.2.

CARTRUK MOBILE UNITS

On sites throughout the United Kingdom



Interior layouts designed to meet your individual requirements; e.g. Tool Stores, Ablutions, Canteens etc.

Unit Sizes: 22', 18', 16', 12' and 10' x 7'6"



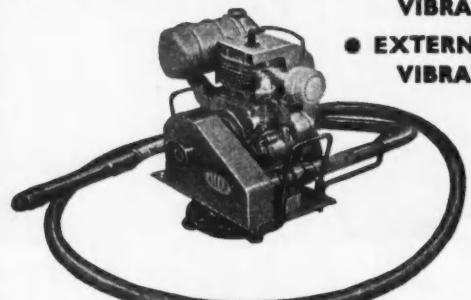
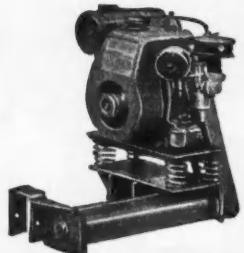
CARTRUK LIMITED

"Beehive Mill," Marsland St., Portwood, Stockport.
Write or phone: - STOCKPORT 5227

ALLAM

HIRE FROM
THE MAKER

- VIBRATING TAMPERS
- PAN VIBRATORS
- BAR CROPPERS
- ROTARY FLOATS
- LIFT & FORCE PUMPS
- INTERNAL VIBRATORS
- EXTERNAL VIBRATORS



HIRE WITH OPTION TO PURCHASE

ALLAM MACHINERY HIRE LTD.

132-135 SLOANE STREET, S.W.1 Telephone: SLOane 9976 (5 lines)

SCOTLAND: 39 Cavendish Street, Glasgow, C.5 Telephone: South 6186

HELICOPTER SERVICES LTD. through their CIVIL ENGINEERING ADVISORY SERVICE can supply you with comparative costings for the use of helicopters on construction projects in any part of the world.

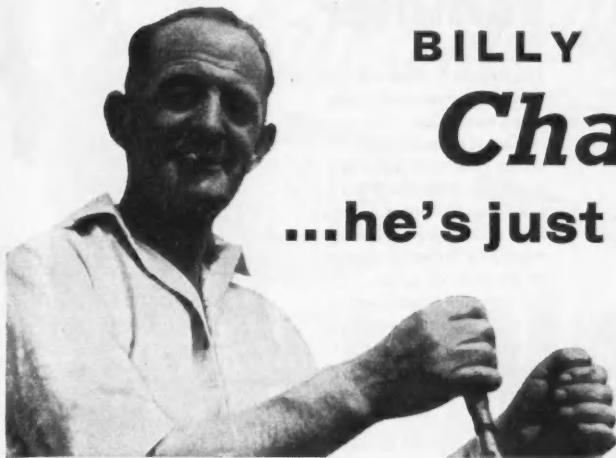


**WE SPECIALISE IN THE
FOLLOWING
TYPES OF CONTRACT**

- Transport of construction materials
- Power line construction
- Pipe line construction
- Triangulation survey
- Seismic & Gravity meter survey
- Site reconnaissance
- Aerial photography
- Personnel & freight transport

**HELICOPTER SERVICES LIMITED
LUTON AIRPORT, LUTON, BEDS.**

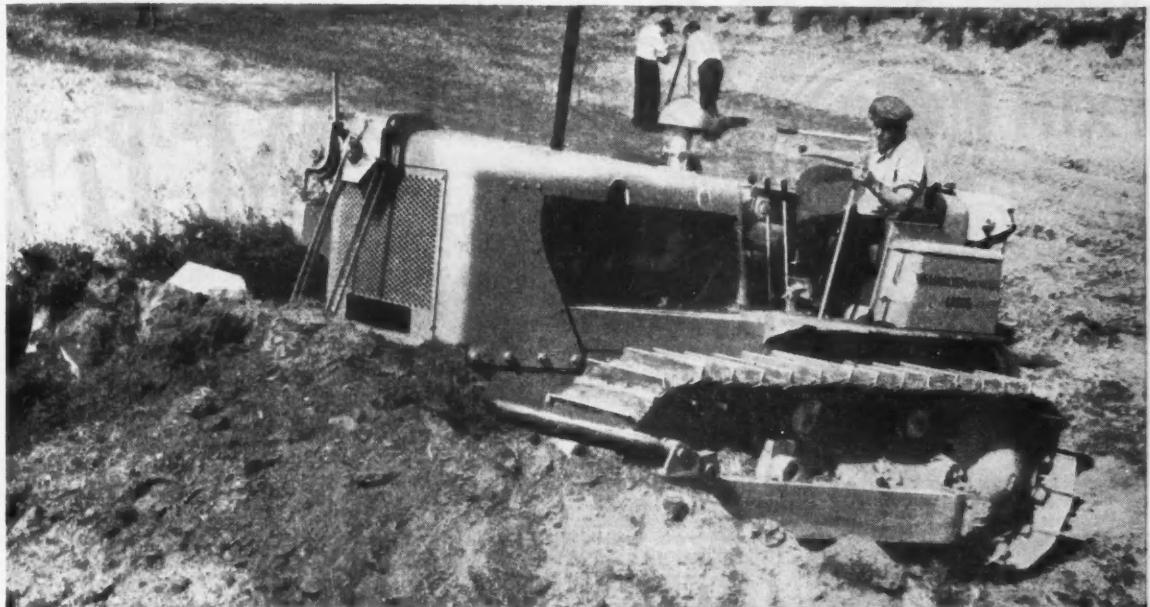
Telephone: LUTON 4911-2



BILLY LYKE LIKES
Challengers
...he's just taken his twelfth

Billy Lye, managing director of William

Lye (Plant Hire) Ltd., takes delivery of
 yet another Fowler Challenger Tractor
 for work on the A1 road extensions.



Billy Lye has decided that Britain's most competitive crawler tractor for price, performance and service is the Challenger 33. If you would like to try a Challenger for yourself, write or telephone Wards, the U.K.

distributors. They will willingly arrange an on-site demonstration.

The Challenger range of tractors is made by John Fowler & Co. (Leeds) Ltd., and distributed in the U.K. by :-

THOS. W. WARD LTD

ALBION WORKS, SHEFFIELD. PHONE: 26311
 London Office: Brettenham House, W.C.2. Phone: TEM 1515

SALES & SERVICE DEPOTS
 Sheffield 26311
 Glasgow Scotstoun 8083
 Briton Ferry 3166
 Grays Thurrock 4764 & 4806
 Coventry Bedworth 3011

Announcing the NEW

Inexpensive...

 **Aeroquip**



GOLDEN FLOW

QUICK-RELEASE

SELF SEALING

COUPLING



With its simple quick release action, Aeroquip 'Golden Flow' brings a new approach to the method of connecting hydraulic feed lines. No screwing or unscrewing—just push or pull; automatic sealing immediately on disconnection; and at a low initial and replacement cost.

Write for illustrated literature to:—

HUBERT H. P. TRIST & CO. LTD.
Top-Dog Works, Brislington, Bristol, 4
Telephone: BRISTOL 77093

**STREAMLINED POWER
rammer**

The Pegson Streamlined Power Rammer really gets down to the job. Faster, better, it's one jump ahead of any other and features a unique controlled jump that's easily changed from a full 21 inches to "tamping" merely by adjusting pressure on the control handle. The rammer is effective on all soils, including clay or wet ground. For greater impact, increased coverage and reduced operation costs, RAM IT with the Pegson Rammer — find out about it now.



RAM IT!



**PORTABLE ROAD
ripper**

Here's the machine that's ideal for road ripping, rock and hardcore breaking, demolition, digging clay, light pile driving, etc.,—it's the Pegson Road Ripper. This self-contained, portable machine needs no compressor, air lines or heavy transport and it's so efficient. Quick to start, easy to operate—write for further details on the Pegson Ripper today.

RIP IT!

PEGSON

Built within the Bentley Group by

PEGSON LTD., COALVILLE, LEICESTERSHIRE

Telephone: 1234 (10 lines)

London Office: Idesleigh House, Caxton Street, London, S.W.1
Telephone: Abbey 2373

Scottish Office: 7 Lister Road, Hillington Industrial Estate, Glasgow. Telephone: Halfway 1800

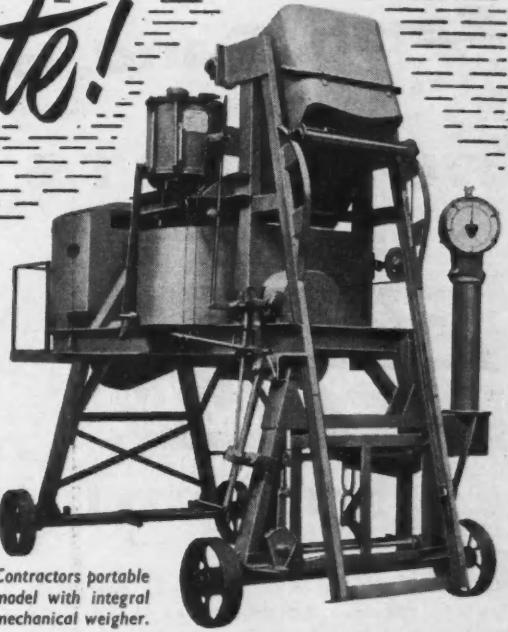
Half a minute!

THE LINER

CUMFLOW

The quickest, most efficient mixer of them all!

...ONLY 30 SECONDS FOR A PERFECT MIX!



Contractors portable model with integral mechanical weigher.

When you install a Cumflow you are fitting a reliable piece of constructional equipment that has been tried and proved in over a quarter of a century of practical use. Cumflow concrete is absolutely unsurpassable. It gives strength... and maximum strength at that... in only 30 seconds of intensive *scientifically planned* mixing. The hourly output is governed only by the speed at which the mixer can be re-charged and as many as 80 batches per hour have been achieved. The saving effected by the Cumflow, using less cement and less water without loss of quality, can be tremendous.

Made in 6 sizes, from No. 0 size 2ft. 5½ ins. diameter pan with 2 cu. ft. input capacity to the No. 6 size 9 ft. 3 ins. diameter pan with 36/40 cu. ft. input capacity.

SPOT-ON WEIGHING

Mechanical weigher can be fitted as an integral part of the machine and ensures accurate weighing.

MECHANICAL SHOVELLING

Another optional extra which saves labour.

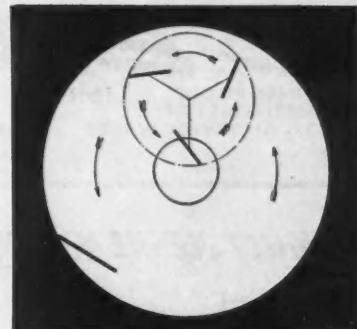
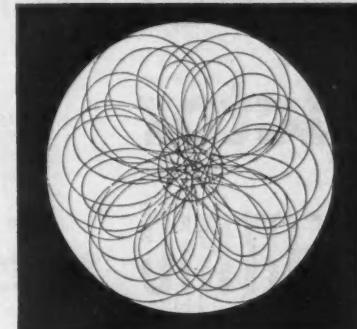


Diagram of Mixing Blades in Single Star Machine.



Showing Path of the Mixing Blade in one Revolution of the Pan.

25 years SUPERIORITY... still the best!

There is no other mixer as good as the Cumflow... not even another Liner Mixer! Here are some brief extracts from satisfied customers letters.

- 'We have had over 10,000 lbs. PER SQUARE INCH using ordinary cement'
- 'Our production INCREASED BY ONE THIRD'
- 'NO BETTER MIXERS for semi-dry and particularly abrasive mixes'
- 'Co-efficient of variation for the whole of 1956 was only 7·2%'
- 'Batches were going through at less than ONE MINUTE PER BATCH'
- 'Maintenance cost per ton of mixed concrete too small to be calculated'
- 'These machines work perfectly'
- 'It is the finest mixer obtainable'

Fuller extracts from letters can be seen on request.

HIRE PURCHASE TERMS... ONLY 10% DEPOSIT

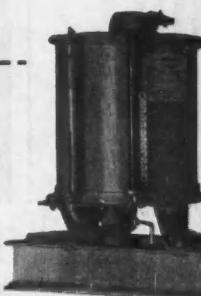
Please send full details of Cumflow Mixer.

Name.....

Address.....

THE LINER CONCRETE MACHINERY CO. LTD.

Phone: Gateshead 72501 281, PARK ROAD, GATESHEAD, 8. Grams: "Liner, Gateshead"
London Office and Showrooms: Lexden Road, Acton, W.3. Phone: ACorn 8931



and only LINER machines have the patented INVARAC WATER TANK for positive metering

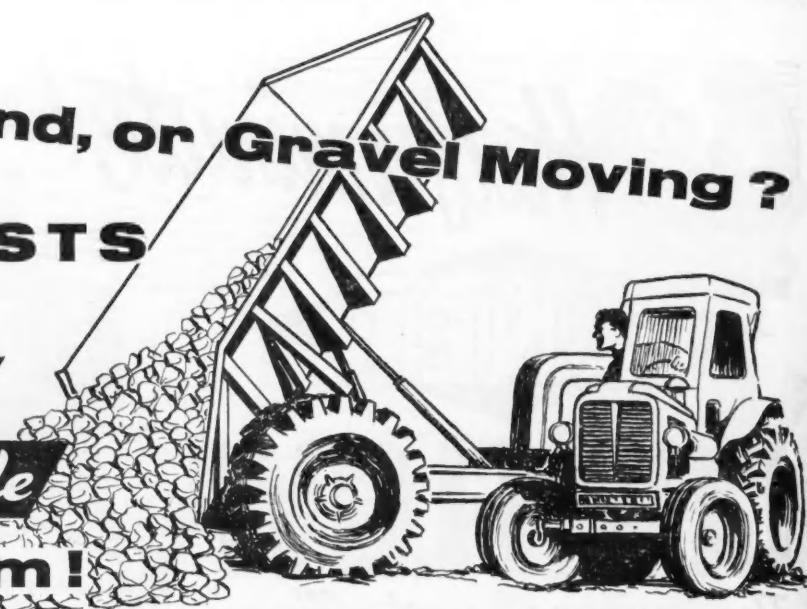
BY APPOINTMENT
TO HER MAJESTY
THE QUEEN



MANUFACTURERS OF
CONCRETE BLOCK &
MIXING MACHINERY

Earth, Sand, or Gravel Moving?

CUT COSTS
with the
Shawnee Poole
system!



Cut first costs, fuel costs, and maintenance costs by making 50 h.p. do the work of 100. Save valuable man-hours by speeding turn-round and allowing straight-line hauls across rough country.



IT'S THE COUPLING THAT DOES IT!

Transfers towed weight to driving wheels, increasing adhesion and hauling power without front wheel lift or rear axle strain.

Its three-dimensional articulation copes with both 110° turns and the roughest terrain.

For further information contact:

**161 GOWER ROAD
SWANSEA Tel: 22438**

C.E.M. Day
SHAWNEE-POOLE LIMITED (TRACTOR DIVISION)

DISTRIBUTORS FOR
SOUTH AND WEST WALES

MAIN FORDSON DEALERS

RDH 505/Day

YOU MUST SEE THE NEW, NEW

NEW MARK V

Victor

ELECTRIC

HAMMER DRILL

**WILL SAVE YOU £££££'S
HAS NO EQUAL FOR DRILLING
IN BRICK, STONE OR CONCRETE**



**ROTARY AND
PERCUSSIVE
ACTION**

Phone for a Demonstration

EXISTING USERS

A CONVERSION SET IS
AVAILABLE WHICH WILL
CONVERT YOUR PRESENT
VICTOR INTO THIS NEW
OUTSTANDINGLY
SUPERIOR MACHINE.

**HIRING SCHEME AND
H.P. TERMS AVAILABLE**

VICTOR PRODUCTS (WALLSEND) LTD • WALLSEND-ON-TYNE • ENGLAND • SERVICE DEPOTS THROUGHOUT THE COUNTRY
LONDON POLLARDS 0077 DONCASTER 2515 STOCKPORT 5295 WALLSEND 68331 EDINBURGH 53987 LICHFIELD 2052 NEWPORT 6204

BETTER THAN EVER PERFORMANCE!

IMPROVED TRACTION & WEIGHT DISTRIBUTION ON ALL MODELS!

Benford Dumpers are now better than ever before — yet cost no more! Improved traction and weight distribution on all models have given them a better than ever performance.

For full details please write for our new catalogue and price list No. 5916

15 cwt. capacity — **MARK 3**
• Water level 12 cu. ft. Struck level 15½ cu. ft.
Heaped 18 cu. ft. Skip loading height 39".

22½ cwt. capacity — **MARK 7**
• Water level 18 cu. ft. Struck level 22½ cu. ft.
Heaped 27 cu. ft. Skip loading height 41".

30 cwt. capacity — **MARK 12/30**
• Water level 24 cu. ft. Struck level 27 cu. ft.
Heaped 36 cu. ft. Skip loading height 44".

£330 Cash Price or **£33** down and 12 equal monthly payments of £26.49

£459 Cash Price or **£46** down and 12 equal monthly payments of £36.98

£615 Cash Price or **£62** down and 12 equal monthly payments of £48.17.8

DELIVERY FROM STOCK — CARRIAGE PAID IN ENGLAND AND WALES

BENFORD LTD.

THE CAPE

• **WARWICK** • Telephone: **WARWICK 1170**



DIESEL DUMPERS



REVERSING DRUM MIXERS



ТИLTING DRUM MIXERS



POWER BARROW



“Thermo-Fax” all-dry copiers

help to save office time and money.



1 **Statements.** You need never type a statement again! A copy of your own completed ledger card takes just 4 seconds on a THERMO-FAX All-dry Copier — addressed and ready for the mail.

Short Note Replies. Much internal correspondence needs only a short written comment in reply. Write the comment on the original letter, take a copy on the THERMO-FAX All-dry Copier and use it as your reply!



3 **Addressing.** Special THERMO-FAX copy paper — already gummed and perforated — makes 39 ready-to-use labels from your master list, in 4 seconds. Only one typing — used again and again.

Reports. Copies of multi-page reports are no longer a big copy-typing problem. At just 4 seconds per page the THERMO-FAX All-dry Copier makes short work of the longest report.



5 **Letters.** Quick, extra copies of letters for all who need them speed office work. The THERMO-FAX All-dry Copier uses no chemicals, no negatives. Saves copy-typing and expense, and copies are always accurate.

Roughs and Proofs. Keep the original in your master file. Let the THERMO-FAX All-dry Copier provide crisp, clear copies for interested departments immediately.



7 **Incoming Orders.** Send the original order to the department concerned but also send copies ahead for credit checking and invoicing. All paper work completed by despatch time with a THERMO-FAX All-dry Copier!

Price Lists and Sales Information. The very latest information goes out to the Sales force immediately when there's a THERMO-FAX All-dry Copier in the office. Keep everyone up-to-date at low cost!



...in 10 different WAYS

9 **Bills of Quantities.** Send perfectly dry clean copies of relevant work to sub-contractors—by 4-second copying with the THERMO-FAX All-dry Copier. No chance of transcription errors, and your quotations are despatched and received faster.

Accounting. Balance sheets can be copied with accuracy in 6 seconds with the THERMO-FAX Brief Model All-dry Copier. You can copy just relevant figures if you wish.



10



Look around any business — *your business* — and you will find many jobs that could be improved, in speed and efficiency, while reducing costs, with the help of the versatile THERMO-FAX All-dry Copier. The THERMO-FAX All-dry Copier is unique among copying machines. It uses no negatives and no messy chemicals. It is as clean and simple to use as a telephone. It provides clear, ready-to-

use copies in just 4 seconds, from start to finish. The Copying Products Division of 3M have world-wide experience of the many up-to-date methods of speeding office work and cutting costs through the THERMO-FAX All-dry Copiers. Why not draw upon this experience — it can be yours freely and without obligation if you will write or return the coupon below.

THERMO-FAX All-dry Copiers are available in two sizes:-

"Secretary" —for copies up 9" wide **"Secretary" BRIEF Model**—for copies up to 14" wide

Thermo-Fax

REGD. TRADE MARK

"Secretary" ALL-DRY COPIERS

**Only Thermo-Fax All-dry Copiers
do so many jobs for such low cost!**

Post to: COPYING PRODUCTS • MINNESOTA MINING & MANUFACTURING CO LTD • 3M HOUSE • WIGMORE STREET • LONDON W1 (HUNTER 8829)

Please send us further information about the THERMO-FAX "Secretary" All-dry Copiers.

FIRM.....

(ATTENTION OF).....

ADDRESS.....





**The
GULLICK
HYDRAULIC "BURSTER"
for silent and controlled
DEMOLITION**

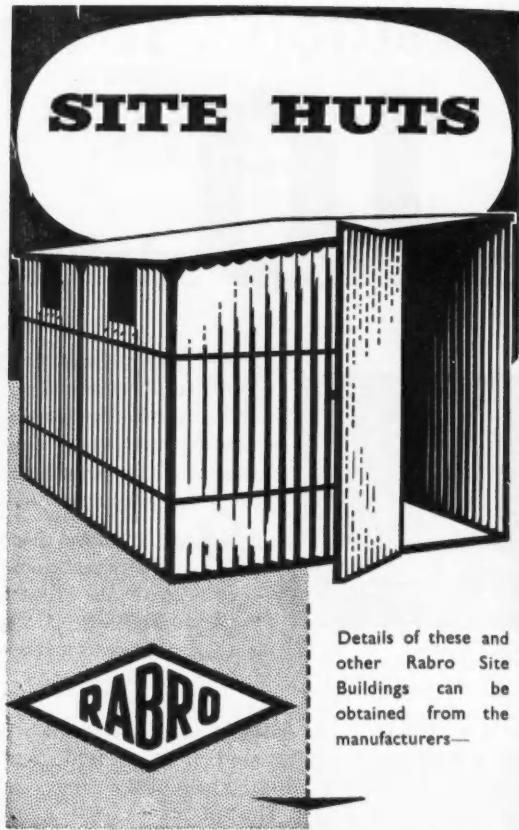
Write now for our illustrated brochure:-



GULLICK LIMITED
KIRKLESS STREET WIGAN

Telephone: WIGAN 46225 (3 lines)

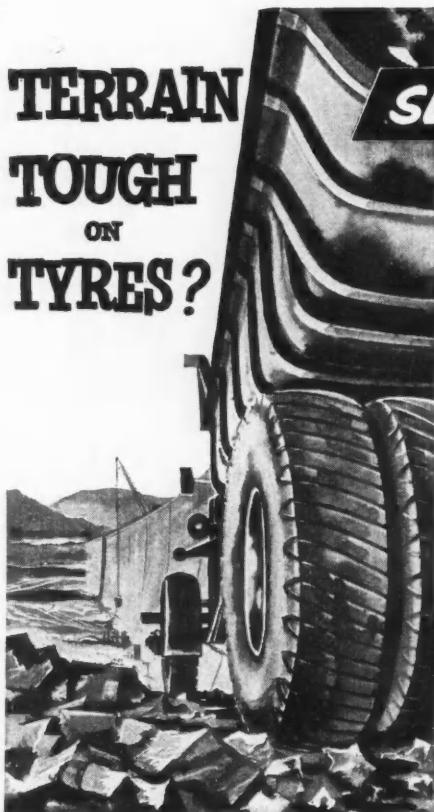
G12



Details of these and other Rabro Site Buildings can be obtained from the manufacturers—

J. W. RAYLOR & CO. (ENGINEERS) LTD
59 Beavers Lane, Hounslow, Middx. Telephone Hounslow 8091/2

**TERRAIN
TOUGH
ON
TYRES?**



SLASH

CONTRACT COSTS

**WITH
Vacu-Lug
REGD.
RECONDITIONED TYRES**

If you have not yet examined in detail the astonishing increase in working life which can be achieved through Vacu-Lug reconditioning, then it would pay you to do so now. Sound covers can be reconditioned again and again with Vacu-Lug.

"RECONDITIONED WITH VACU-LUG" MEANS
PROLONGED WORKING LIFE · REDUCED OVERHEADS

WHATEVER THE PATTERN,
the size or your location, we can recondition your tyres speedily through our national chain of Distributors and Dealers.

Write British Vacu-Lug Ltd. for details and the address of the nearest factory or distributor.

VACU-LUG
REGD TRADE MARK



BRITISH VACU-LUG LTD., GONERBY HILL FOOT, GRANTHAM. Tel. Grantham 1548/9

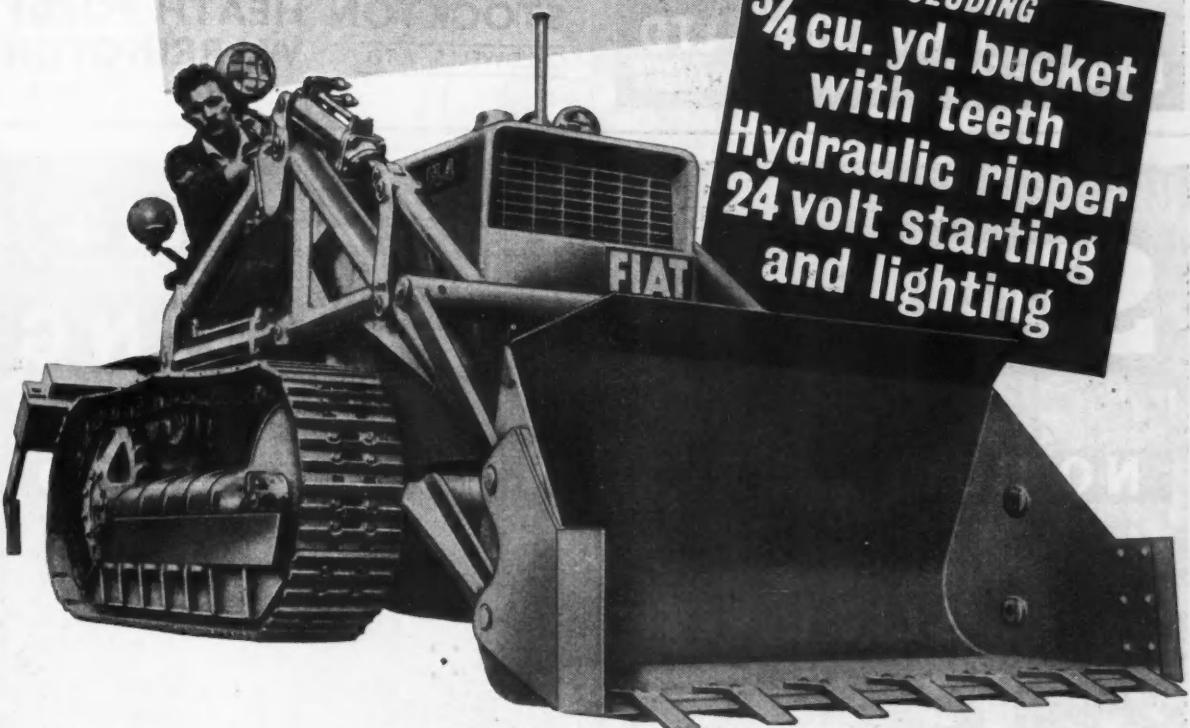
THE MACHINE OF THE FUTURE AVAILABLE TODAY!

40 H.P. FIAT FL4

READY - TO - GO
AT

£2,695

INCLUDING
3/4 cu. yd. bucket
with teeth
Hydraulic ripper
24 volt starting
and lighting



-proved right for the builder

MACKAY of Feltham

MACKAY INDUSTRIAL EQUIPMENT LTD., CENTRAL WAY, FELTHAM, MIDDLESEX. (FELTHAM 3435)

Distributors for Scotland, Northumberland, Durham, Cumberland, Westmorland: SCOTTISH LAND DEVELOPMENT CORPORATION, GLASGOW

**KEEP OUT WET
KEEP INTACT**



Your Weather Protection Problem solved with **DRIX** Plastic Tarpaulins and Covers for all purposes

Low original outlay, light, durable, easy to handle, do not rot

Apply for full details to :

STACK PROTECTION LTD
Drix House, Silver Hill, Winchester. Tel 2635

CALDWELLS

Original (Patent)
Solid Blade



"The Best in the World"



TRADE MARK

UNEQUALLED FOR STRENGTH AND DURABILITY

**STOCKTON HEATH FORGE
CALDWELLS, LTD. WARRINGTON**

ESTABLISHED 1770

Ref.112D

SPAN A COMPLETELY NEW IDEA IN **SCAFFOLDING**

NO BOLTS **NO COUPLERS**

SLIDE FIT

UP IN A MOMENT



BB&EA BRITISH BUILDING & ENGINEERING APPLIANCES LTD Sandy Beds Tel 291/2 London W9 Tel Park 3961/2 Wednesbury Staffs Tel 1035/6

"Well Tom, we've earned a pint. That will be the foundation of another good job, and right on schedule too."

"Cheers Jock. Let's drink to 'HYDROSET' and to Tarmac Roadstone who produced it."

"What a change from the old days when it was hand pitching and nothing else. Waterbound Macadam has revolutionized this side of our work and I think that 'HYDROSET' is the best of the lot."

"Yes, Tarmac Roadstone boast of their success with over a million tons of this material. Where can you go wrong?"

"Standing you another drink if you're not careful. But seriously, I depend a lot on Tarmac Roadstone."

"And they, I know, value your experience and 'Know-how' Jock. Come along, drink up — a toast, to you and me and to them — a good partnership in every sense."



A Member of



TARMAC ROADSTONE LIMITED

AND ASSOCIATED ROADSTONE COMPANIES

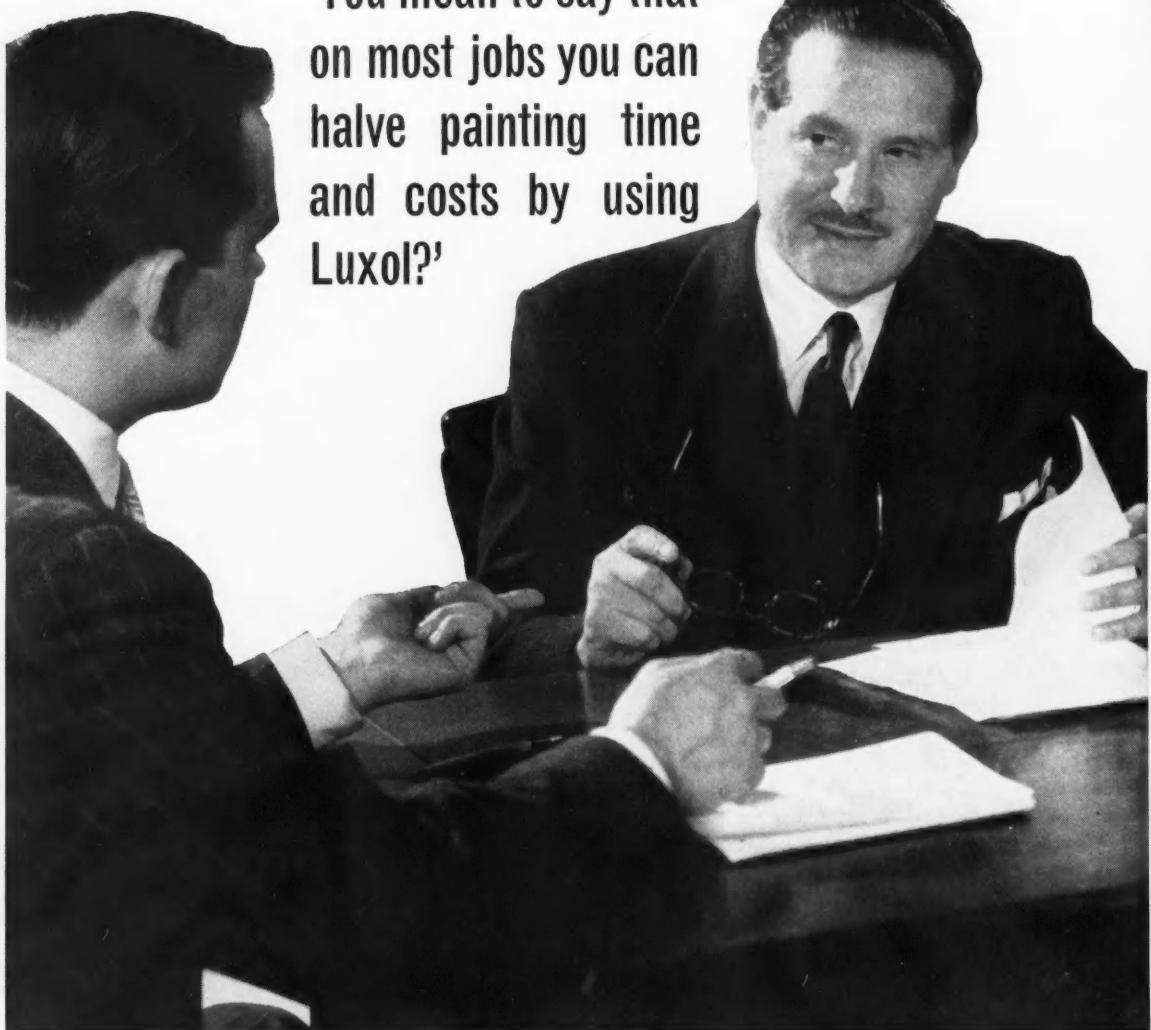
the Tarmac Group

Sole Manufacturers of "TARMAC" "CLOSTEX" "ASPHALTIC GRITITE" "SETTITE" "HYDROSET" and suppliers of DRY SLAG AGGREGATE for all purposes.

Head Office: ETTINGSHALL, WOLVERHAMPTON. Tel. BILston 41101/14

London Office: 50 Park Street, W.1. Tel: GROSvenor 1422/5

'You mean to say that on most jobs you can halve painting time and costs by using Luxol?'



BY APPOINTMENT TO
HER MAJESTY QUEEN ELIZABETH II
MANUFACTURERS OF PAINT
BRITISH PAINTS LIMITED

LUXOL



Precisely. The Luxol range has been specially developed to provide greater opacity on the numerous occasions when the existing paint surface is adhering well and an undercoat can be dispensed with. Luxol Enamel whether used inside or outdoors, as a single coating over paint surfaces in good condition or as the final coat in a traditional painting system, is undoubtedly the finest finishing coat available today.

HIGH OPACITY PAINTS

A GOOD DEAL QUICKER!



BRITISH PAINTS LIMITED

Portland Road, Newcastle upon Tyne, 2.
Northumberland House, 303-306, High Holborn, London, W.C.1.
31, Wapping, Liverpool.



Belfast * Birmingham * Bristol * Cardiff * Glasgow * Leeds * Manchester * Norwich * Plymouth * Sheffield * Southampton * Swansea and all principal towns.

A new narrow
dumper from

18/2/60 SUPPLEMENT III
THE CONTRACT JOURNAL

Thwaites

The **SPRITE** dumper
gives you the reliability
& ruggedness of **BIG**
dumper performance
in **NARROW** form without
increasing loading height



49½ inches wide SPRITE
takes a load 13 cu.ft.
water level ·3 speed
box adds speed to
compact design for more
payload per day even in
cramped conditions

£332.10 del
On site in 24 hours

Thwaites

THWAITES ENGINEERING CO. LTD., CUBBINGTON
LEAMINGTON SPA. Tel: 3089



GENUINE IH service part

that you can rely on!

Why 'make do' with non-standard parts? By just phoning your IH dealer, you can get parts that are *exactly* the same as those used to build new IH machines coming off the line. *Genuine* IH service parts are made to strict IH specifications. That's why they keep your IH equipment working at top efficiency.

Your IH dealer carries 1,000's of *genuine* IH service parts, ready for use at a moment's notice. And his IH training makes him your best adviser on all service matters.

Take full advantage of it.



International

CONSTRUCTION EQUIPMENT DEALERS IN GT. BRITAIN AND N. IRELAND

JAMES BOWEN & SONS LTD.

EDINBURGH (Telephone Waverly 4204)
GLASGOW (Telephone Govan 2611)
ABERDEEN (Telephone Aberdeen 43332)

R. CRIPPS & CO. LTD.

NOTTINGHAM (Telephone Nottingham 74235)
MANCHESTER (Telephone Trafford Park 1658)
SHILDON (Telephone Shildon 281)

SAVILLE (TRACTORS) LTD.

LONDON (Telephone Ashford 4191)
STRATFORD (Telephone Stratford 4242)
CARDIFF (Telephone Cardiff 33572)
BELFAST (Telephone Dunmurray 2511)

WESTERN CONTRACTORS SERVICES LTD.

BRISTOL (Telephone Avonmouth 3473)

International CONSTRUCTION EQUIPMENT
THE FINEST ON TYRES AND TRACKS

INTERNATIONAL HARVESTER COMPANY OF GREAT BRITAIN LIMITED
 HARVESTER HOUSE • 259 CITY ROAD • LONDON EC1



Track-Marshall

THE DADDY OF THEM ALL



Marshalls of Gainsborough





THE NEW DOUGLAS FOUR WHEEL DRIVE DUMP TRUCK FOR MUCKSHIFTING



FOUR-WHEEL-DRIVE - SHORT WHEELBASE - 70° TIPPING GEAR
 UNSURPASSED ECONOMY - UNOBSTRUCTED VISIBILITY - CONFORMS TO ROAD ACT
 EASY STEERING - AIR BRAKES - ALTERNATIVE BODIES AVAILABLE
 DESIGNED FOR THE JOB BY SPECIALISTS
 Write for fully illustrated booklet

Sole U.K. Distributors:—

THOS. W. WARD LTD | **ALBION WORKS • SHEFFIELD**
 Phone: 26311 (22 lines) Grams: "Forward, Sheffield"

LONDON OFFICE: BRETTENHAM HOUSE, LANCASTER PLACE, STRAND, W.C.2. Telephone: Temple Bar 1515
 Also at COVENTRY Telephone: Bedworth 3011 GLASGOW Telephone: Scotstoun 8083 BRITON FERRY Tel: 3166

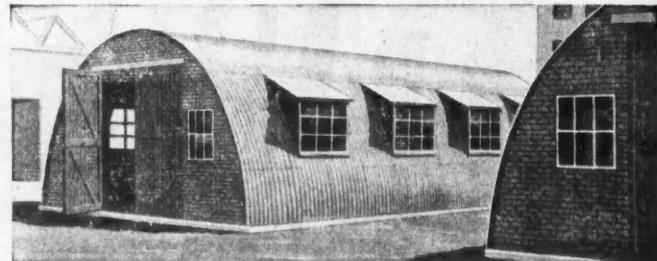
LC 86



Low-cost building needed here?

THORNS

HAVE JUST THE JOB!



● **THORNS STANDARD**

CURVED-ROOF BUILDINGS are certainly the answer for those requiring really low-cost buildings for site work of any kind. The simple construction provides for quick and easy erecting and dismantling, and the large range of standard sizes available gives freedom

of choice with speedy delivery. An erection service is also available.

These highly adaptable buildings are constructed in multiple lengths and in the following widths:—16ft., 24ft., 30ft., 35ft., and 90ft.

If you prefer timber buildings, Thorns supply these also.

THORNS

J. THORN & SONS LTD. (Dept. 73), BRAMPTON ROAD, BEXLEYHEATH, KENT.

BD 508

Remember....



**BRISTOL
PLANT
HIRE LTD**

Tel: BRISTOL 70321 (4 lines)

BATH ROAD, BRISLINGTON, BRISTOL 4

PLYMOUTH DEPOT. Tel: PLYMSTOCK 2049 & 2529

NEWPORT DEPOT. Tel: NEWPORT 67121/2/3

PORTSMOUTH DEPOT. Tel: TITCHFIELD 3124/5

EXETER DEPOT. Tel: EXETER 59561

BIRMINGHAM DEPOT. Tel: MIDLAND 5447/8



**OVER 300
LOCAL
AUTHORITIES
HAVE CHOSEN
BATLEY
MULTIPLE GARAGES
— concrete proof
of reliability!**



Godiva Ribbed Multiple Garages

Batley offer the most adaptable and economical technique in lock-up garage erection. Can be erected back-to-back; or stepped to suit sloping sites. Fitted with 'Up and Over' or hinged doors as required or available with wooden roller shutter doors as optional extra. Free advisory service; 3 years guarantee; 5 years free fire insurance; Attractive deferred terms; Extensive free delivery area.

Write for free illustrated brochure
ERNEST BATLEY LIMITED
 141 Colledge Road, Holbrooks, Coventry. Tel: 89245. Also 141 New Islington, Manchester 4, & 123 Shepperton Road, London, N.1

R A P I E R T I L T I N G M I X E R S

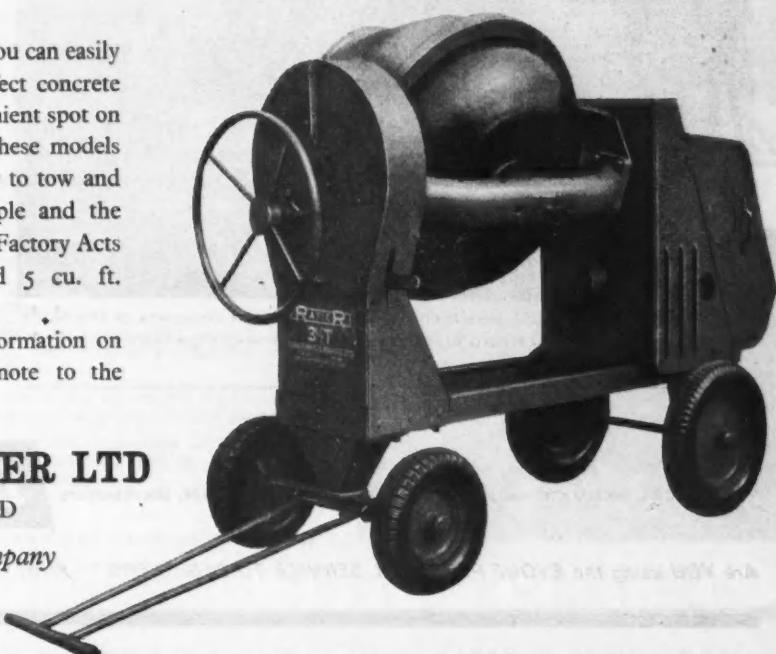
Hand loaded—strong—light—easy to move

With the smaller Rapier Mixers you can easily produce batch after batch of perfect concrete at any time... at the most convenient spot on any site. For all their strength, these models are kept light, well-balanced, easy to tow and easy to move. Controls are simple and the safety features fully meet British Factory Acts requirements. Capacities 3½ and 5 cu. ft. mixed batches.

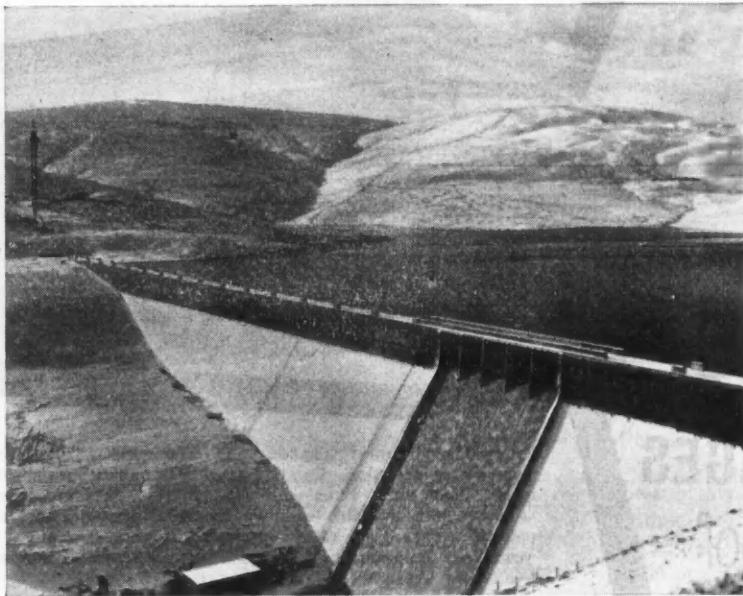
We will gladly send you full information on Rapier Mixers — just send a note to the address below.

RANSOMES & RAPIER LTD
 IPSWICH · ENGLAND

A Newton Chambers Company



Why more and more contractors are using Darex AEA



IN BRITAIN Darex AEA was used throughout in the concrete construction of the Glendevon Dam



IN BRITAIN Darex AEA was incorporated in the bulk concrete of the North of Scotland Hydro Electric Board's Ailt-na-Lairige Dam

- * The first and foremost Air Entraining Agent
- * Used in the U.S.A. for more than 27 years on major projects
- * In use throughout the world

Darex AEA is the original air entraining agent that has proved itself throughout the world for Dam Construction, Structural Concrete, Roads and Aerodromes, Bridges, Maritime Works and Concrete products. America, Belgium, Canada, Norway, Portugal, Sweden, Switzerland, and many other countries acclaim Darex AEA as the first and foremost air entraining agent.

TECHNICAL SERVICE may be obtained from the sole U.K. distributors

EVODE

OF STAFFORD

Are YOU using the EVODE PERSONAL SERVICE TO DESIGNERS? Write or phone for details.

EVODE LTD., (BUILDING CHEMICALS DIVISION), STAFFORD Tel: 2241 (5 lines)

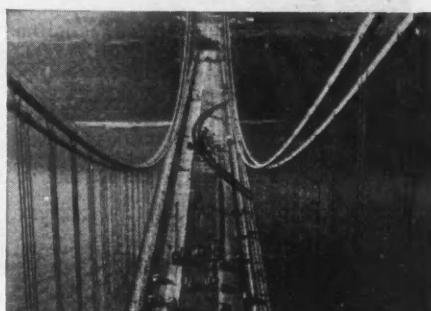
Ask for **Darex AEA**

as the fifth ingredient for concrete

DAREX AEA, a ready-to-use, dark brown liquid, is an aqueous solution of triethanolamine salts of a sulfonated hydrocarbon. For smoother flow and finer finishing, it lubricates the concrete mix with millions of tiny air bubbles. It also contains a catalyst which promotes more rapid and complete hydration of portland cement. Not a resin or by-product, DAREX AEA is a chemical formulation manufactured to insure predictable performance. It is harmless and neutral and requires no pre-mixing with corrosive chemicals or water.

DAREX AEA is ideally suitable for ready mixed concrete, structural concrete, mass concrete construction, concrete road construction, repairs and patching and concrete products.

- Air bubbles guard against frost damage and cracking even with repeated freezing and thawing.
- Makes concrete resistant to saline solutions, de-icing salts, sulphate, and sea waters.
- Less mixing water can be used with no loss in slump.
- Improves placeability.
- Air bubbles lubricate and plasticize the mix.
- Minimizes bleeding, green shrinkage and segregation.
- Catalyst promotes faster and more thorough hydration, thus bringing out more of inherent strength of portland cement; assures greater strength in both lean and rich mixes than non-catalyzed air entraining agents.
- Will not entrain excessive air.
- Particularly effective with slag, light-weight or manufactured aggregates that tend to produce harsh concrete.
- Permits use of natural sand deficient in fines.



Reduce water with **WRDA**

WRDA, an aqueous solution of highly purified metallic salts of lignin sulfonic acid, is a ready-to-use, non-setting, dark brown, mobile liquid. It acts as a dispersing and plasticizing agent—makes possible easily placeable mixes with up to 20% less water content and a corresponding increase in strength and durability. It contains a catalyst which counteracts the normal hydration-retarding effect of dispersing admixtures; and a preservative. It is compatible with all known air entraining agents. WRDA does not require agitation, it comes ready-to-use.

WRDA is particularly effective in improving concrete when the mix is chuted, rodded, vibrated or otherwise treated during placement. It is ideally suitable for lightweight and prestressed work, roads, runways, ready mix plants, job site plants and batchers, block and concrete plants.

- WRDA reduces natural interparticle attraction of cement grains and makes the mix more workable and placeable with less water.
- Gives low slumps without loss of placeability.
- Makes concrete flow cleanly around reinforcing steel and respond quickly to vibration, spading and compacting.
- Improves water retention and internal cohesiveness of the plastic mix.
- Cuts green and drying shrinkage.
- Reduces bleeding, honeycombing, water gain voids under aggregate and other segregation.
- Allows concrete floors to be finished sooner.
- Increases compressive strength up to 25%; also increases flexural and tensile strengths.
- The action on cement is physical. It does not change the chemical properties.
- Improves appearance of concrete by sharply reducing spalling, leaching and sand streaking.

AIR METERS AND DISPENSERS ARE READILY AVAILABLE

London Office: 82 VICTORIA STREET, S.W.1 Tel: ABBey 4622 (3 lines)

H.W.1638

**Away with the Old,
in with the New**

CARTRUK MOBILE UNIT

fitted with all Modern Conveniences, including Flush Toilets, Wash Basins with Hot and Cold Water. (Supplied with Eisan Toilets if required.)



Write for further particulars to :—

CARTRUK LIMITED,
Marsland Street, Portwood, STOCKPORT
or Phone 5227/8.

TIMEG DONKEY JACKETS

**REINFORCED
SHOULDER
LINING OR
FULLY LINED**



Two-Garments-in-One to protect from Cold and Rain. Made of latest showerproof woollen material. Available with reinforced shoulder lining or fully lined. Write for details and estimates to:

TIMEG LTD 102 WARDOUR STREET, LONDON, W.1
Telephone: GERrard 1191/2

Just a tick!

**What's Alfred Allen got
that you could do with?**

We produce everything listed — and more. What's been ticked is most likely to interest you. But maybe you could add a few more ticks. Or cross out some. The important thing is that whatever enquiries you send us, we'll gladly submit a quotation. Your order and instructions will be executed explicitly. Accurately. Efficiently. That's the way Alfred Allen work. That's what we've got a reputation for.

Alson Patent Clip Joint and Universal Bend	
Brick Cars	
Crane Skips	✓
Heaters, Coolers, Cyclones, Shells and Stacks	✓
Hoppers and Chutes	✓
Light Railway Equipment	✓
Platework and Fabrications	✓
Steel Butt-Welded Pipe and Specials	✓
Steel Pallets	
Steel Ventilation Ducting	
Tanks and Vessels (Lloyds approved)	✓



ALFRED ALLEN & SON LTD

Lower Gornal, Nr. Dudley

London Office: 23 Lawrence Lane, E.C.2 Tel: MONarch 2978.

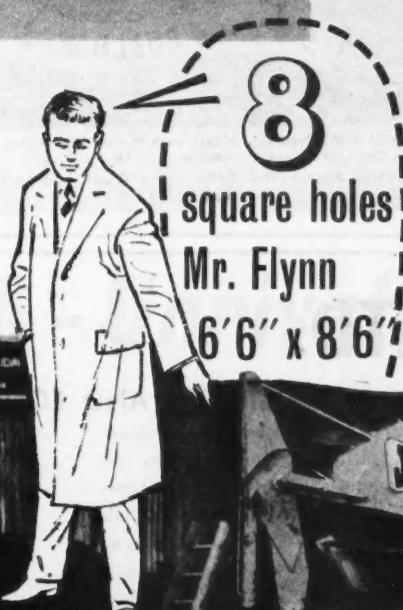


HYDRA-DIGGA/LOADALL 65

"How many square holes did you dig yesterday Mr. Glyn?"



SQUARE HOLES ON A CONFINED SITE



8
square holes

Mr. Flynn

6'6" x 8'6"

On this confined London site, Messrs. Flynn Excavators Ltd. are proving 3 special features of the HYDRA-DIGGER/LOADALL 65. First . . . it's the only excavator capable of digging square holes in hard material. Second . . . it's a fast and trouble-free worker. Third . . . it can be operated on confined sites, such as the one illustrated below. These 3 advantages alone should convince you that the only excavator for your jobs is the JCB. But there are many other features that make this machine the finest of all excavators. May we have the opportunity of proving it by demonstration?



Sole Distributors in NORFOLK, SUFFOLK, HUNTS., ESSEX, CAMBS., BEDS., HERTS., MIDDX., LONDON, SURREY, KENT, E. SUSSEX

Ernest Doe AND SONS LTD
INDUSTRIAL DIVISION **ULTING MALDON** **ESSEX**
TELEPHONE: HATFIELD PEVEREL 311 (NIGHT 319)

WHITLOCK
DINKUM DIGGER
MAJOR

ESSEX
DISTRIBUTORS

SYMES
 (PLANT SALES) LTD
 BRENTWOOD · ESSEX
 Telephone BRENTWOOD 2116 (5 lines)

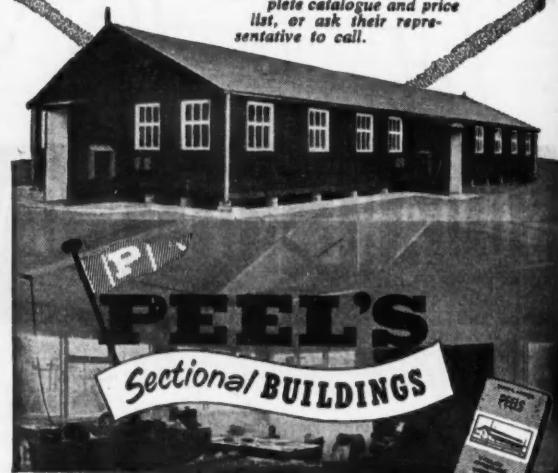


built in hours to last for years!

Peel's sectional buildings are the permanent answer to your accommodation problems. There's a tremendous range — for schools, offices, workshops, storerooms, canteens, hostels, pavilions, libraries, estate offices, etc. — all soundly constructed from well-seasoned timber.

- Easy to erect.
- New timber throughout.
- Range of designs.
- Individually designed, if required.
- **FREE DELIVERY** within 200 miles radius.

Send for PEEL'S complete catalogue and price list, or ask their representative to call.



PEEL'S
Sectional BUILDINGS

H. PEEL Ltd., Dept. C.J., Mearclough Works, Wakefield Road, Sowerby Bridge, Yorkshire. Tel: Halifax 81211
 SOUTHERN AREA AGENT: Airflow (Watford) Ltd., Oxhey Lane, Watford, Herts.
 Phone: 21579

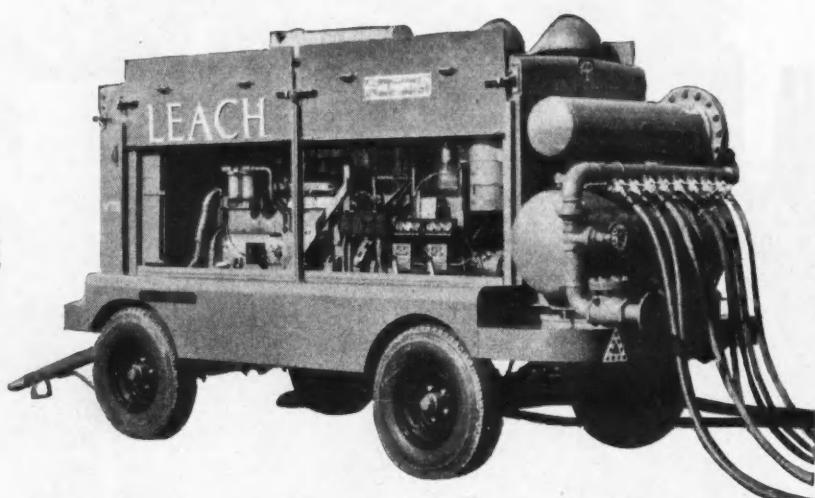
286SC

HUBERT C. LEACH LTD.

"OFF THE SHELF" SERVICE FOR PNEUMATIC TOOLS AND EQUIPMENT

FOR
SALE

FOR
HIRE



AIR PUMPS COMPRESSORS FROM 70 TO 650 C.F.M.

ARMSTRONG-WHITWORTH PNEUMATIC TOOLS AND ACCESSORIES

WRITE FOR DETAILS: HUBERT C. LEACH LTD., HIGH STREET, CHESHUNT, HERTS. Tel.: WALTHAM CROSS 25161 (5 LINES)

February 18 1960

THE CONTRACT JOURNAL

SUPPLEMENT

i a



C.6 - Unrivalled Performance

The advanced design of the C.6 Crawler Tractor brings new standards to this field. Take a look at these items: 217 hp through torque converter and Torqmatic Transmission... Full power shift... Three speed ranges forward and reverse, up to 7.9 mph... Greater stability with more track length to overall length... Seven-roller track frame... Full hydraulic, automatic track tensioning... Greater service accessibility... Convenient controls... Good visibility... Rear-mounted cooling system... Oil-cooled power-actuated steering clutches... Less operator fatigue... Independently suspended final drive... All adding up to a NEW HIGH IN TRACTOR WORK-ABILITY!

Why not have Blackwood Hodge, our United Kingdom Distributors, arrange a demonstration for you?



EUCLID *MOVES THE EARTH*

EUCLID (Great Britain) LIMITED • NEWHOUSE • SCOTLAND

Toughest of all!

The Bulldog all metal

Plastic Sheathed

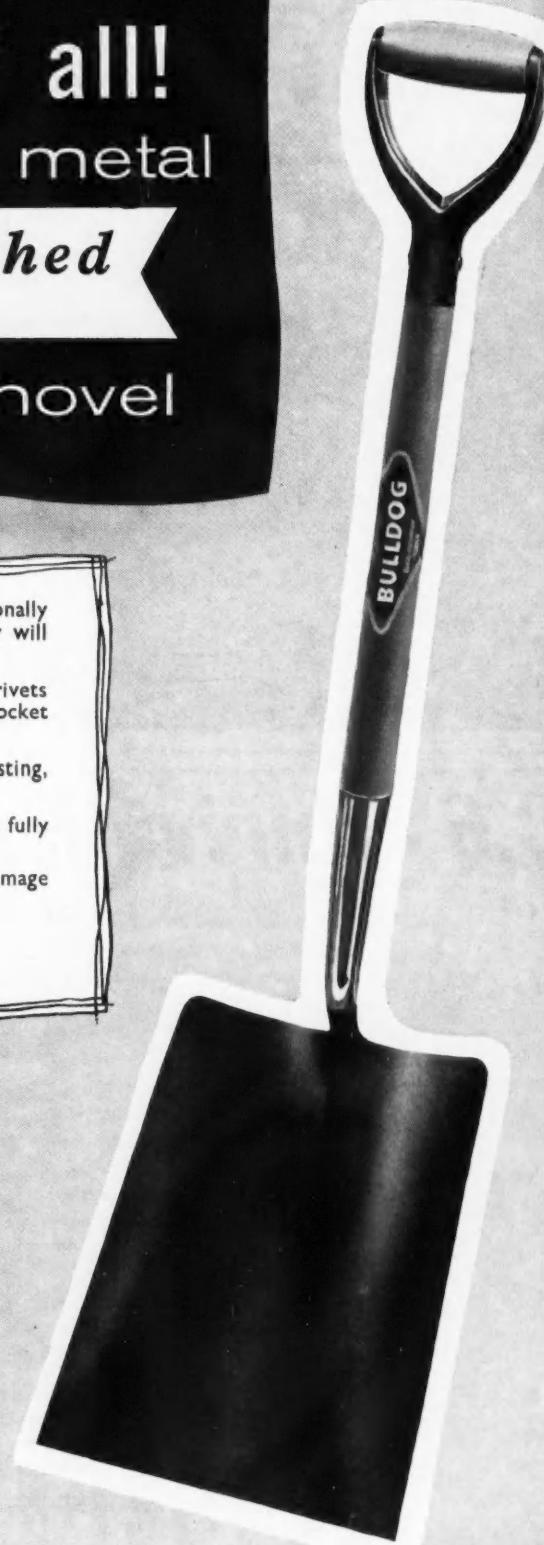
PAT. APPLICATION NO. 23225/58

contractors shovel

1. Bulldog All Metal Plastic Sheathed Tools are exceptionally strong. Being forged from special quality steels they will retain their strength for the whole life of the tool.
2. Smooth and comfortable to hold with no projecting rivets and no danger of splinters. Short length of bare socket means hands do not work on cold metal.
3. Insulating plastic sheathing eliminates danger of rusting, previously a problem with all metal tools.
4. Bulldog All Metal Plastic Sheathed Tools are fully guaranteed.
5. All parts are replaceable in the unlikely event of damage or breakage.

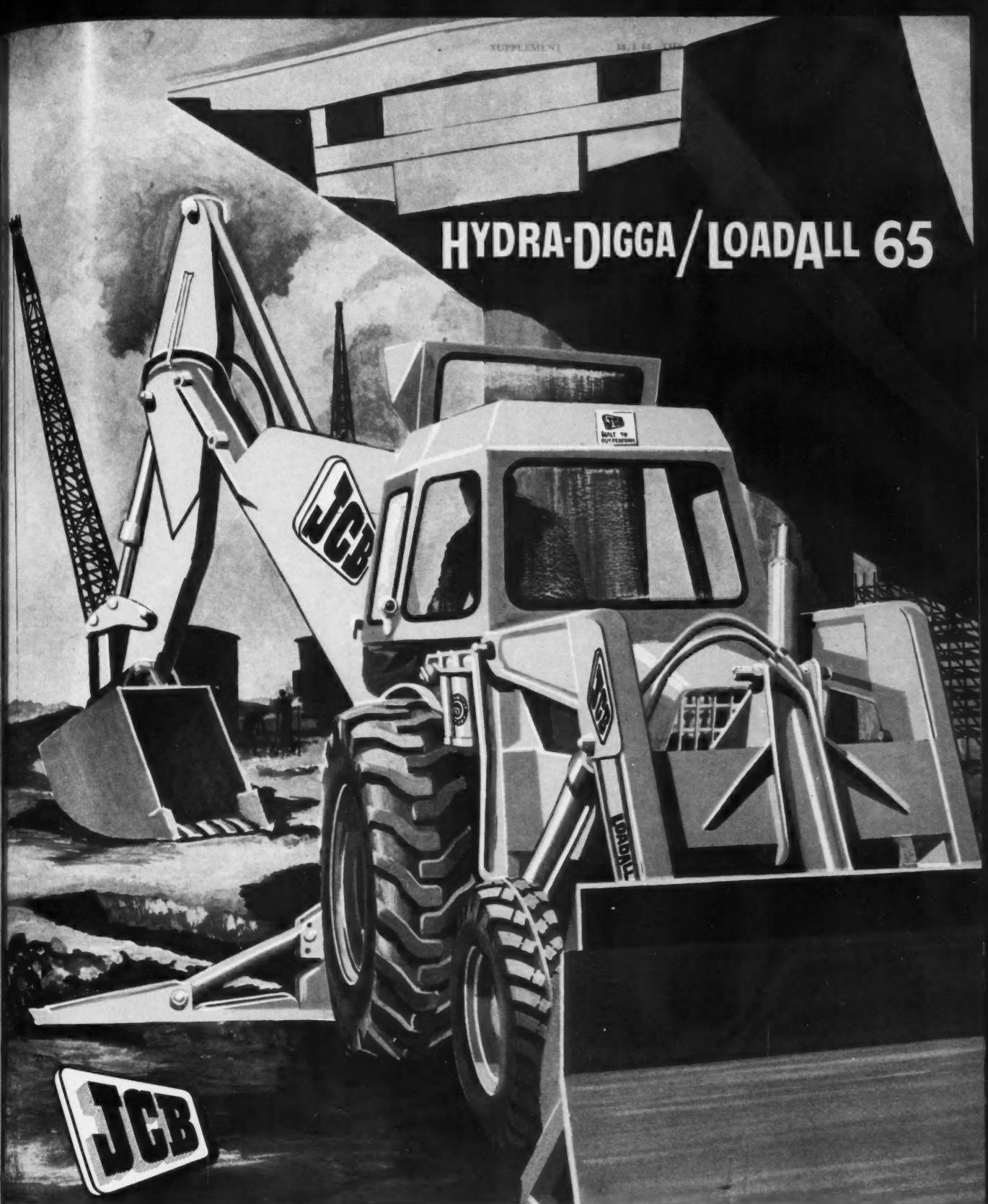
DELIVERY EX STOCK

ILLUSTRATED:
PATTERN 5221 SQUARE MOUTH
also available:
PATTERN 5321 ROUND MOUTH



ENGLISH TOOLS LTD • CLARINGTON FORGE • WIGAN

HYDRA-DIGGA/LOADALL 65



a service backed product

MARSH PLANT & MACHINERY CO LTD SOUTH STREET EMSWORTH HANTS 2032

C. E. M. DAY LTD 161 GOWER ROAD SKETTY SWANSEA GLAMORGAN 22438

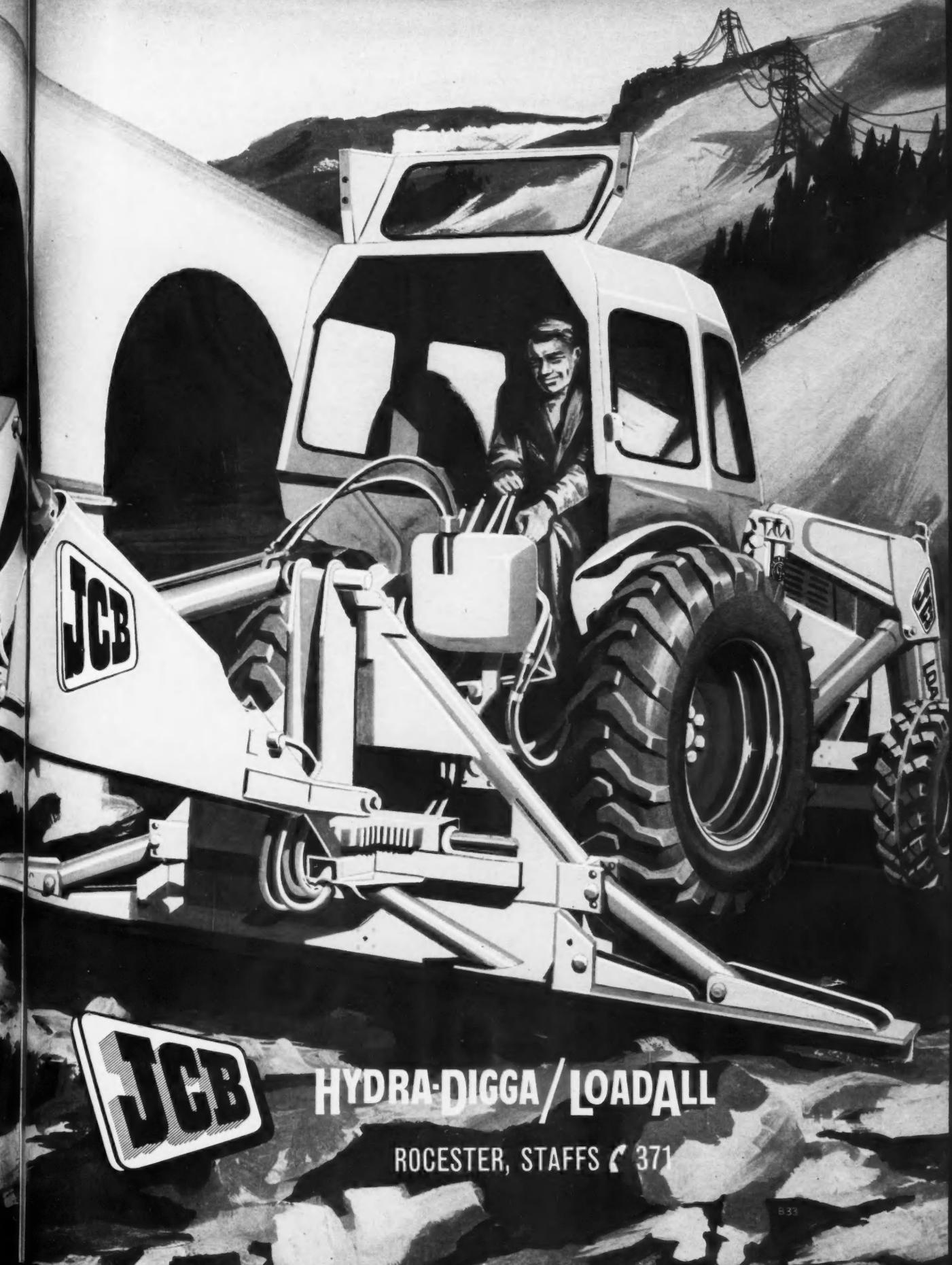
BERKSHIRE DIGGERS LTD 75 SOUTH AVENUE ABINGDON BERKS 781

STATE OF LEEDS LTD LEEDS ROAD OTLEY YORKS 3361

ROUGH JOBS NEED



TOUGH MACHINES



HYDRA-DIGGA/LOADALL

ROCESTER, STAFFS 371

If your plant
costs MORE
than you think
it should ...

MOORE'S PLANT
will cost you
LESS

MOORE'S

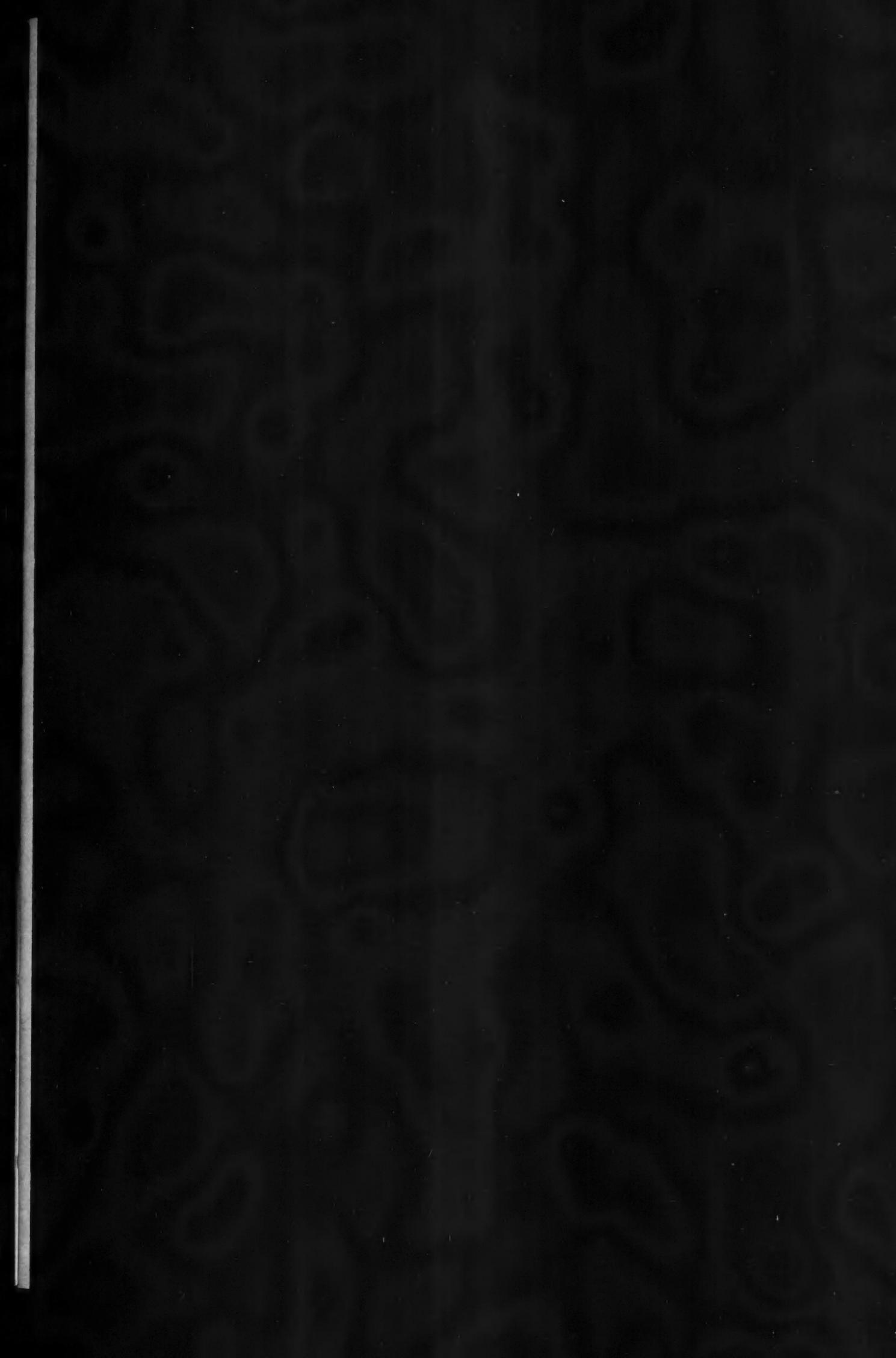


Tel: TOTTENHAM 0401 (8 Lines)

MOORE'S PLANT LIMITED

105/129 MARKFIELD RD., TOTTENHAM, LONDON, N.15

Agents: "Mannington" Southgate London"





MISCELLANEOUS ITEMS. BUILDINGS. PROTECTIVE CLOTHING, FENCING, TARPAULINS, ETC.

CAST-IRON SPIGOT and SOCKET PIPING, mostly new, standard lengths. Immediate delivery. 16in. bore, 100ft. 9in. bore, 200ft. 15in. bore, 100ft. 8in. bore, 500ft. (Screwed Gland). 15in. bore, 100ft. 6in. bore, 500ft.

CAST-IRON FLANGED, mostly new. 15in. bore, 11 x 12ft. lengths. 10in. bore, 30ft. x 12ft. lengths. Stanton. 15in. bore, 100ft. 9in. bore, 500ft. 4in. bore, 500ft. chiefly 9ft.

Also large selection BENDS, SLUICE VALVES. Full details on request.

FRED WATKINS (ENGINEERING), LTD., Coleridge, Glos.

FOR SALE: Large Quantity of Pressed Steel SECTIONAL TANKS, 4ft. x 4ft. x 4ft., complete with bolted cover and riveted manlid. Supplied dismantled in plates 4ft. x 4ft. x approx. 1in. thick. Delivery ex stock. — **THE MIDLAND IRON AND HARDWARE CO. (CRADLEY HEATH), LTD.**, Cradley Heath, Staffs. Tel.: Cradley Heath 66364-5-6.

WANTED, SCAFFOLDING, PROPS, etc., and all types of NON-MECHANICAL BUILDERS' PLANT.

PLANT AND BUILDING EQUIPMENT, LTD., Chatfield Works, 1 Chatfield Road, Battersea, London, S.W.11. Telephone: BATTersea 9213.

LATTICE STEEL ERECTION MASTS (Light and Heavy), 50ft. to 150ft. high, for immediate HIRE. — **BELLMAN'S**, 21 Hobart House, Grosvenor Place, W.1.

FOR SALE: PUFLOGS. Steel and Alloy. 5ft. and 6ft. Large stocks always available. Contact: C. EVANS AND SONS, LTD., Burnside Wharf, Burnside Street, Bow, E.3. Tel.: ADVance 5691/2/3.

CONTRACTORS' AND BUILDERS' TOOLS

JOHN MACNAMARA & COMPANY LIMITED, BUSH ROAD, LONDON, S.E.8. BERMONDSEY 3275 & 1405

GUYREX FORMWORK STEEL OR PLYFACED

Complete schemes with quotations submitted against your enquiries. Sale or Hire. Write or Phone

GUYREX EQUIPMENT LTD., 25 CRAVEN ST., LONDON, W.C.2. Telephone: Whitehall 2445

PATENT

VICTORIA

STONE

THE PATENT VICTORIA STONE CO., LTD.

Established 1868

Southern Area: 638 Salisbury House, Finsbury Circus, London, E.C.2. Telephone: National 0513/4/5

Midland Area: Groby, Leicester Telephone: Annesley 2503

CAST STONE FOR ALL ARCHITECTURAL PURPOSES

"PATENT VICTORIA" AND "VICTORITE NON-SLIPPING" PAVING SLABS

"PATENT VICTORIA" CONCRETE GARAGES

Also Coal Bunkers, Posts & Precast Concrete Products of every description.

Full particulars and prices from

By courtesy of Wm. Davis (Leicester) Ltd.

With our usual high standard of workmanship and finish we are able to construct Buildings to your own design and specification, or to offer suggested layouts for your consideration.

Harlow Bros.

Write for literature of our complete range

LONG WHATTON • MR. LOUGHBOROUGH • LEICS. Tel: HATHERN 381

BUILDINGS FOR EVERY PURPOSE

CONTRACTORS' HUTS

Standard sizes from 8' x 6' to 100' x 24' and larger.

Made from selected timbers.

Delivery within 7 days of order.

ELECTRICIANS. — Send for details. **SHAFTESBURY LIGHTWEIGHT "BANTAM"** LADDERS, in section 6ft. 6in. Patent MOULDED RUBBER BLOCKS eliminate possibility of slipping or marking walls, fascias and other painted or highly polished surfaces. Also available for immed. delivery: STEPS, PLATFORM STEPS, TRESTLES, TELESCOPIC TRESTLES, POLE and BUILDERS' Type LADDERS, and LADDERS of Two and Three Section EXTENSION LADDERS.

SHAFTESBURY LADDERS, LTD. (C.I.), 453 Katherine Rd., London, E.7. Grangewood 3363-4.

NEW HUTS AT OLD PRICES. 60ft. x 20ft. £395, with floor. 60ft. x 15ft. £350, with floor.

40ft. x 20ft. £280, with floor.

30ft. x 15ft. £185, with floor.

15ft. x 10ft. £100, with floor.

To save money, compare these prices.

PANEL-PLASTIC CONSTRUCTION CO., LTD., Belvedere Works, Railway Terrace, Feltham, Middx. Telephone: Feltham 5761.

FOR SALE AND HIRE Chatfield Multi-purpose Rollover CONCRETE POURING SKIP, which offers the advantage of BOTH BOTTOM DISCHARGE or FRONT DISCHARGE from the one unit at a total price only little above the cost of existing single-purpose skips.

PLANT AND BUILDING EQUIPMENT, LTD., Chatfield Works, 1 Chatfield Road, Battersea, London, S.W.11. Telephone: BATTersea 9213.

FOR SALE: EVANS OF BOW offer from stock 2,000 ft. H.F. FRAMES, 4ft. 6in. also HALF-FRAMES, 3in., and ADJUSTABLE JACKS. All in first-class condition.

Contact: C. EVANS AND SONS, LTD., Burnside Wharf, Burnside Street, Bow, E.3. Tel.: ADVance 5691/2/3.

CLEFT CHESTNUT FENCING AND POSTS

All Types and Sizes

The AYLESFORD FENCING Co. Ltd., Quarry Wood • London Road • Aylesford • Kent Phone: Maidstone 7213

FELT ROOFING

ALLWEATHER ROOFING LIMITED

8 St. Francis Close,
Petts Wood, Kent
ORPINGTON 21141

All Grades Tarred and Dry Lime-stone, Hardcore, Ashes, Red Shale, Concrete Aggregates, High Grade Screened Building Sand delivered in the Midlands, Nottingham area or F.O.R. Capacity 750 tons daily, hopper loaded, weighbridge on site, 4 miles from Nottingham,

SHENINGTON QUARRIES LTD.

2 BOSWORTH ROAD, NOTTINGHAM

Telephone - Nottingham 84819

SALE or HIRE

ROAD FORMS ALL TYPES
PROPS Numbers 1, 2, 3, 4
Trench Struts Nos. 1, 2, 3
Column Clamps
Trench Sheetings



RAPID METAL DEVELOPMENTS LTD.

Birmingham — Birchfields 6021
London — Tideway 2625
Glasgow — Bridgeton 4214
Stockton-on-Tees 64150
Liverpool — Simonswood 2482
Swansea 50464
Exeter 63595
Fareham 2017
Belfast 24591
Dublin 54456

MISCELLANEOUS ITEMS, BUILDINGS, PROTECTIVE CLOTHING, FENCING, TARPAULINS, ETC.

FOR SALE.

500 tons re-layable 75lb. per yard F.B. RAILS, in 36ft. lengths, with fishplates and fishbolts, etc., to suit. 20 CROSSES in re-layable 75lb. per yd. F.B. rail, with all necessary fittings. 100 tons of re-layable 95lb. per yd. B.H. RAILS, in 60ft. lengths, with fishplates to suit. 2,000 re-layable CHAIRED SLEEPERS, suitable for 95lb. per yd. B.H. rail.

EDWARD ASH, LTD.

Kent Wharf, Creekside, Deptford, London, S.E.8. CONCRETE POURING SKIPS. CIRCULAR TIPPING SKIPS available. 2½ cu. ft. to 20 cu. ft. For SALE and HIRE.

PLANT AND BUILDING EQUIPMENT LTD., Chaffield Works, 1 Chaffield Road, Battersea, London, S.W.11. Telephone: BATtersea 9213.

WANTED: surplus stocks of COAL, SLACK FILTER COKE and other types of SOLID FUEL. C.A.G. (LONDON), LTD., Industrial Fuel Distributors, 22 Westbourne Park Road, London, W.2. Telephone: BAYwater 2288/9.

TARPAULINS for SALE and HIRE. EDWARD ASH, LTD., Kent Wharf, Creekside, Deptford, S.E.8. Telephone: Tideway 2661/2.

FOR SALE: 6½ tons 1½in. dia. M.S. BARS, stock-rusted, in 6/5/4ft. lengths. Available immediately. inspection, offer and collection at Wimbledon. Telephone: WIMbledon 3085.

FOR SALE: 10 x 5 and 12 x 6 CONCRETE KERBS. MOULDS, lying North England. For further details, write Box M.1249, "The Contract Journal."

NEW SEAMLESS PIPING

Available ex stock—very attractive prices. 2,500ft. 6½in. o.d. x 5-gauge, long randoms. 1,500ft. 5½in. o.d. x 5-gauge, long randoms. 500ft. 8½in. o.d. x 5-gauge, flanged ends. 1,000ft. 10½in. o.d. x 5in. long randoms.

DOWNTINGS (BARNESLEY), LTD., Doncaster Road, Barnsley, Yorkshire. Telephone: Barnesley 3603/4.

TARPAULIN HIRE

JOHN MACNAMARA & CO. LTD., BUSH ROAD, LONDON, S.E.8. BERMONDSEY 3275 & 433

SECTIONAL TIMBER BUILDINGS

For quality with economy, buy "MIDDLESEX". Standard size range from 8' x 6' to 100' x 30'.

J. E. LESSER & SONS LTD., GREEN LANE HOUNSLAW, MIDDLESEX. Telephone: HOUNSLAW 7281/7

STEEL.—60 tons 1in. Square Grip Mild, new, stock rusty; 40ft. long R.S.I.s. Channels: wide range and good stocks second-hand and stock rusty M.S. Rounds, most diameters. CORRUGATED IRON, second-hand, galvanised, black, etc.

A. SIMPSON LTD., 68-70 Pengie Road, South Norwood, S.E.25. Telephone: SYDenham 3131 (3 lines).

FOR SALE: Little Giant Burton DOUBLE COUPLERS, 50,000 in perfect condition. SWIVELS, JOINT PINS and PUTLOG CLIPS also available. Contact: C. EVANS AND SONS, LTD., Burnside Wharf, Burnside Street, Bow, E.3. Tel.: ADVance 5691/2/3.

SPOT CASH FOR SECOND-HAND HUTS. Sites cleared.

PANEL-LASTIC CONSTRUCTION CO., LTD., Belvedere Works, Railway Terrace, Feltham, Middlesex. Telephone: Feltham 5761.

SOUTH CROYDON, 2,250ft. sup., covered, available June, suitable for storage or manufacture, advertiser allied to building trade, could act as distributor. Would consider capital interest. Propositions invited. Write Box M.1235, "The Contract Journal."

FOR SALE: 400,000ft. Steel SCAFFOLDING TUBE, cut lengths 5ft. to 16ft. First-grade condition. Contact: C. EVANS AND SONS, LTD., Burnside Wharf, Burnside Street, Bow, E.3. Tel.: ADVance 5691/2/3.

FENCING IN OAK, prepared to specification, delivered any area. Also GATES and POSTS, all sizes, fitted ironwork. Keen prices.—J. P. WILLIAMS, Middleton Road Sawmills, Oswestry. Telephone 590.

SHEET LEAD (4lb. f.s.), 85/- cwt. Telephone: BUCkhurst 6688.



RELAYABLE RAILS

300 tons approx. 25lb. per yd. F.B. Section, lengths 20ft. Also Points and Crossings available.

200 tons approx. 65lb. per yd. B.H. Section, lengths 60ft. approx.

30 tons approx. 85lb. per yd. B.H. Section, lengths 26ft. and 33ft.

Rubbing on application. Attractive prices.

Write: COX AND DANKS, LTD., Frederick Road, Salford, 6.

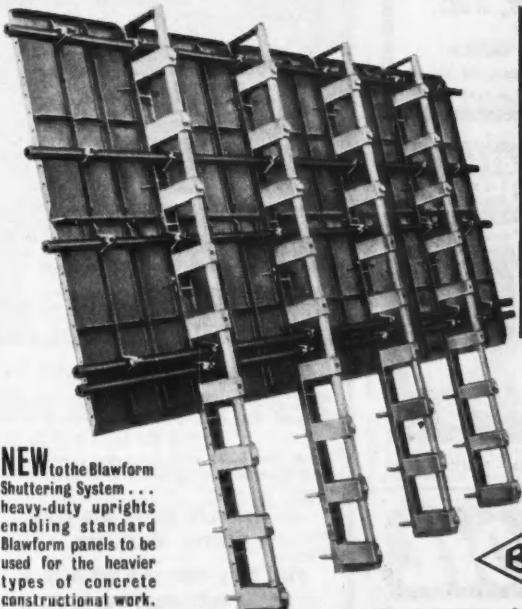
CAMBRIDGE ASPHALTE CO. LTD.

SWANN ROAD, CAMBRIDGE

Telephone: 3341 & 5281/2

ALSO

FLEXIBLE ROOFING PITCH MASTIC



NEW to the Blawform Shuttering System... heavy-duty uprights enabling standard Blawform panels to be used for the heavier types of concrete constructional work.

BLAWFORM SHUTTERING

the adaptable system

For further information please write

BLAW KNOX LTD. Box 146, 90/94 Brompton Road, SW3 KENSINGTON 5151

for
single sided,
double sided,
straight or
circular,
static,
climbing or
slipform
applications

Horizontal alignment can be obtained by either angle, scaffold tubes or lightweight RSJ's.



FOR SALE: Steel and Alloy SCAFFOLDING TUBE and BLADE-END PUTLOGS, DOUBLE COUPLERS, JOINT PINS, SWIVEL COUPLERS, PUTLOG CLIPS also available in quantities. PLANT AND BUILDING EQUIPMENT, LTD., Chatfield Works, Chatfield Road, Battersea, London, S.W.11. Telephone: BATtersea 9213.

FOR SALE: Steel SCAFFOLDING, 5/21ft. lengths. Large quantities. SCAFFOLDING COUPLINGS, all types, new condition. Keen prices.

HUNTS AND BEDS, MACHINERY CO., 23 Huntingdon Street, St. Neots, Hunts. St. Neots 108.

WANTED: used Corrugated Steel SHEETS, from 4ft. and up, 22-gauge or heavier. Also Anderson and Elephant SHEETS.

Contact: C. EVANS AND SONS, LTD., Burnside Wharf, Burnside Street, Bow, E.3. Tel.: ADVance 5691/2/3.

T R U S C O T T FENCING, LTD., DORKING SURRY. Telephone: 3416.

All classes of FENCING supplied and erected. Specialists in Chain Link. Estimates free.

FOR SALE: NEW ROADFORM PINS, 7½in. or 1in. dia. x 2ft. long.—TEMPLE MILLS (STEEL), LTD., Temple Mills Lane, Stratford, E.15. Tel.: Maryland 2660/7734.

WANTED: CORRUGATED STEEL SHEETS, Second-hand, any area. Site cleared. Prompt payment. 50ft. DUFFY Bldg. Street, Clayton, Manchester, 11. Telephone: East 3361.

WANTED: BRICK and CONCRETE HARDCORE, any quantity.—R. BARKER (PECKHAM), LTD., New Cross, 3337.

ALL SIZES — PROMPT DESPATCH

HUTS

THE PODMORE WORKS

769-773 GARRATT LANE, LONDON, S.W.17

Keen Prices—Phone: WIMBLEDON 7622

RED SHALE

DELIVERED OR EX OUR TIP AT
ORMSKIRK

DIAMOND INDUSTRIES (MANCHESTER) LTD.

Market Street, STALYBRIDGE. STA 3344

EDWARD ASH, LTD.

FOR
RAILWAY SLEEPERS
AND
CROSSING TIMBERS

KENT WHARF, GREEKSIDE, DEPTFORD, S.E.8

Telephone: Tideway 2661-2



SAVE UP TO 80% OF
NORMAL PRICES

We hold fantastically large stocks of genuine Ex-Govt. Paints and due to Bulk purchases we can sell

FIVE GALLONS FOR THE PRICE OF ONE!

50 gallons and over less 10%
Carriage Scotland 3/- per drum extra

SATISFACTION GUARANTEED

DEEP CREAM 5 GALLS.
One part I.C.I. Matt
Finish enamel, interior
or exterior.

BROWN 3 GALLS.
Semi-Gloss enamel.

LIGHT BROWN 3 GALLS.
Semi-Gloss enamel.

BUFF 3 GALLS.
Gloss enamel.

RED OXIDE 3 GALLS.
Primer.

GREY PRIMER 3 GALLS.
1st class undercoat for
metal or wood.

OLIVE GREEN 3 GALLS.
Ideal for outbuildings
etc.

BLACK 3 GALLS.
Suitable for Exterior
Metal work.

BLAW KNOX LTD. 17/6
Box 146, 90/94 Brompton Road, SW3 KENSINGTON 5151

D. A. MULLARD & CO. LTD. 27/6
(O.J.7) B.R. Goods Depot, Edware, Middlesex

MISCELLANEOUS ITEMS, BUILDINGS, PROTECTIVE CLOTHING, FENCING, TARPAULINS, ETC.

FOR SALE. 300 Adjustable Steel SPLITHEADS, overhauled, with folding legs: No. 1, 22/6 each; No. 2, 25/- each; No. 3, 28/6 each; No. 4, 32/6 each. 600 FLOOR CENTRES, fully overhauled and ready for use. No. 1, 22/6 each; No. 2, 25/- each; No. 3, 28/6 each; No. 4, 32/6 each. Also available: COLUMN CLAMPS, BEAM CLAMPS, PROPS. For SALE and HIRE.

PLANT AND BUILDING EQUIPMENT, LTD., Chatfield Works, 1 Chatfield Road, Battersea, London, S.W.11. Telephone: BATTERSEA 9213.

FOR SALE. Steel and Alloy SCAFFOLDING and PUTLOGS. All types of SCAFFOLD COUPLINGS, PROPS, BEAM and COLUMN CLAMPS, FLOOR CENTRES and PANELS. All second-hand plant supplied in first-class second-hand condition, reconditioned where necessary.—Send for lists or telephone: W. C. YOUNGMAN, LTD., Wandsworth Works, Wandsworth Road, S.W.8. Tel.: MACaulay 2233.

ASK ANN FUCHS
A for New or Second-hand PROPS, BEAM CLAMPS, COLUMN CLAMPS, TRENCH STRUTS, ROADFORMS, SCAFFOLD TUBES and Fittings.

Also additional equipment not listed.

87-89 Walton Street, S.W.3.

Telephone: Kensington 8526.

TWO ONLY. Hartley and Sugden Vertical Cross Tube BOILERS, with Heating Pumps and Motors; also Three Ideal R6 8-section BOILERS and Calorifiers, Pipes and Radiators. Cheap for quick sale.—Apply: TITAN HOSTEL, Valley Road, Herringthorpe, Rotherham.

GALVANISED CORRUGATED SHEETS. New sheets in various gauges. Large stocks and competitive prices, delivered anywhere.—Details from: F. PEART AND CO., LTD., Park Rd., West Hartlepool. Telephone: Hartlepool 2141.

WANTED. Alloy and Steel TUBULAR SCAFFOLD, in large quantities only. Sites cleared anywhere. Also NON-MECHANICAL BUILDER PLANT. Contact: C. EVANS AND SONS, LTD., Burnside Wharf, Burnside Street, Bow, E.3. Tel.: ADVANCE 5691/2/3.

WANTED: Second-hand GRANITE KERB, SETTS, BLOCKS; also PAVING, any quantity. Full details, write Box F.987. "The Contract Journal."

REINFORCED RUBBER HOSE

FOR AIR COMPRESSORS
SUCTION & DELIVERY, ETC.

THE CENTRAL MANUFACTURING & TRADING CO. (DUDLEY) LTD.
OLD HILL STAFFS
Phone: CRADLEY HEATH 69181 (5 lines)

HIRE LADDERS

UP TO 80 FT. EXTENDED

TOWER LADDERS

UP TO 35 FT. WORKING HEIGHT

POLE LADDERS

UP TO 80 RUNGS

TRESTLES & STEPS

FROM

JOHN MACNAMARA & CO. LIMITED
BUSH ROAD, LONDON, S.E.8
BERMONDSEY 8275 & 1435

BARGAIN BASEMENT. To clear last remaining stock of ADRIA, LTD. (in voluntary liquidation). We have left:—

9 No. 1 Protected Thread Props.
16 No. 2 Props with Beam Heads.
21 No. 2 Beam Clamps.
49 No. 2 Column Clamps.
92 No. 3 French Struts.

All unused, cost approx. £350.—Offers for the whole parcel, please, to: T. MURPHY, 28 Sackville Street, London, W.1. Telephone: REGEN 6265.

POLYTHENE SHEETING (British VisQueen).—Protect your work, plant and machinery the modern way:—

500 gauge, clear, 12ft. x 150ft. rolls, at £13 14s. 6d.

500 gauge, black, 12ft. x 150ft. rolls, at £15 19s. each. 1,000 gauge, clear, 10ft. x 75ft. rolls, at £11 6s. each. Complete lists and samples from H. C. HILL, LTD., 68-70 Penge Road, South Norwood, S.E.25. SYDneham 3131-4.

CHESTNUT FENCING and POSTS: also WATTLE HURDLES and INTERWOVEN PANELS. Prompt deliveries from works at Croydon and Bexley. BERNARD COLLINS (WOOD PRODUCTS), LTD., 52 Court Road, London, S.E.25. Telephone: LIVINGSTONE 5089.

FOR SALE: Corrugated Steel SHEETS, new and second-hand. Most sizes and gauges in stock.

Contact: C. EVANS AND SONS, LTD., Burnside Wharf, Burnside Street, Bow, E.3. Tel.: ADVANCE 5691/2/3.

FOR SALE, approx. 40 tons BARGE STONE.

1" Offers to: DEEKS AND STEERE, LTD., Godalming, Surrey. Telephone 1755.

SLEEPERS—RELAYABLE & ROADWAY CROSSING TIMBERS—ALL SIZES DELIVERY ex STOCK

F. HARDWICK LTD.
ARMLEY ROAD, LEEDS 12. Phone: 23487

RED SHALE

DELIVERED OR COLLECTED EX PIT
NUNEATON

G. R. YEOMANS LTD., Oxford Road,
Ryton, Coventry. Phone: Tollbar 2376

DEMOLITION HARDCORE, CLINKER & ASHES SAND, BALLAST, ETC.

GEO. E. CLOKE, LTD.

in Association with
HUDSONS DEMOLITION BRANCH
"Elmsted", Neasden Lane, N.W.10
Phone: GLADSTONE 4296-7 & 1163-4



WHITLOCK BROS LTD - GT. YELDHAM - ESSEX Tel: 305

SHELL OIL

FANTASTIC PURCHASE OF M.O.S. OIL STOCKS
EXTRA HEAVY DUTY (SAE 50), SHELL & BP DETERGENT OIL especially suited for Diesel Engines. Ministry packed in 4½ gallon jerricans. **SUPPLIED FREE!**

5 cans @ 22/-, plus 3/- carriage per jerrican

20 cans @ 19/-, plus 2/- carriage per jerrican

50 cans @ 17/6, plus 2/- carriage per jerrican

SATISFACTION GUARANTEED or CASH REFUNDED

D. A. MULLARD & CO. LTD., (Dept. C.I.7) B.R. GOODS DEPOT, STATION ROAD, EDGWARE, MIDDLESEX. EDG. 5574



Open all day Saturdays

FOR SALE. ADJUSTABLE PROPS, 1,500 Type 1X, 400 Type NO. 2X.

ADJUSTABLE STRUTS, 400 Type No. 1, 200 Type NO. 1, 1,000 Type No. 3. All in perfect condition.

Contact: C. EVANS AND SONS, LTD., Burnside Wharf, Burnside Street, Bow, E.3. Tel.: ADVANCE 5691/2/3.

PREFABRICATED STEEL-FRAMED BUILDINGS from stock: 30ft., 40ft., 50ft., 60ft., 75ft., 80ft. clear spans, and lengths in increments of 12ft. 6in. Sheeting may be either asbestos or galvanised.—Write for Catalogue Ref. K.104, from THE LILLESHALL CO., LTD., Oakengates. Telephone: Oakengates 120.

HARDCORE FREE, to be loaded and collected from City of London. —Telephone: Royal 1569.

ELECTRICAL SPARES AND OVERHAULS, VEHICLES AND ANCILLARIES

FOR SALE. INTERNATIONAL ROLLERS, TRACK PIN and BUSH GROUPS, TRACK BOLTS, TD9 TRACK CHAINS and other SPARES of all descriptions. Good discounts.

Write Box E.9439. "The Contract Journal."

J. JOHNSTON AND CO., LTD., for REPAIRS and OVERHAULS and FIELD SERVICE to all types of Contractors' Plant, Mobile Cranes, etc.—Phone Edgar 6905. RAPIER SPARES AND SERVICE, Coronation Road, Park Royal, London, N.W.10.



FRANK COWLEY

200

DEPENDABLE BUSES AND COACHES FOR YOUR INSPECTION AND TEST

ALL VEHICLES CAN BE TAXED AT £12 10 0 PER YEAR

1948 A.E.C. 34-seater Buses, fitted A.E.C. 7.7 or 9.6 Diesel Engines. First-class throughout. £295 each.

1949/50 DENNIS 33/35-seater Coaches, fitted Dennis Big 6 Diesels and Gardner SLW Diesels, with 5-speed gearboxes. Excellent machines, £325 each.

1948 BRISTOL 35-seater Buses, fitted Gardner SLW Diesels and 5-speed gearboxes. First-class machines, £325 each.

1945/46/47/48 A.E.C. Guy and Daimler 39-seater Buses, fitted with modern 8ft. wide bodies, and powered by Gardner SLW and A.E.C. 7.7 Diesels. Good, sound, clean, genuine machines, £250 each.

LEYLAND PS1 and TS1 32/35-seater Single-deck Buses and Coaches, from £175 each. All road tested and ready for work.

1947/1948 A.E.C. Guy and Leyland Double-deckers, high and low bridge, A.E.C. 7.7, Gardner SLW and 6 LW Diesels, also Leyland PDI Diesels. From £195 ex.

Write for latest stock list, also special spare part price list showing saving of 75% on spares.

ALL VEHICLES CARRY OUR THREE MONTHS' GUARANTEE

WILL TAKE YOUR OLD VEHICLES IN PART EXCHANGE

FRANK COWLEY
3 Blackfriars Road, Salford, 3

Phone: MANCHESTER BLACKFRIARS 7577
ext 1 BLACKFRIARS 1048

ELECTRICAL EQUIPMENT, SPARES AND OVERHAULS, VEHICLES AND ANCILLARIES

RUSTON POWER TO SERVE YOU
From stock: SERVICE EXCHANGE ENGINES, Type VRON, VRONN, VRHN, VQBN, VPHN, VEN, VCBN.

Full range of ENGINES from 10RB to 54RB Excavators. SERVICE EXCHANGE ENGINES also stocked for Cranes, Dozers, Trucks, Power Packs, etc.

CHAMPION OVERS to EXCAVATORS and other PLANT UNDERTAKEN on site by STAFF of competent FIELD ENGINEERS.

TILSLEY AND LOVATT, LTD., Engine and Plant Div., Newstead Trading Estate, Trentham, Stoke-on-Trent. Telephone: Trentham 57331 and 57332. Telegrams: "Diesel", Stoke-on-Trent.

BRAND NEW Diesel POWER UNITS, by Chrysler, 67-h.p., 1,800 r.p.m., complete on baseplate, electric starting, radiator and drive coupling. Price £185 each.

LISTER Diesel GENERATING PLANTS, 230-Volts, complete units with Switchgear. Price £120 each. **UNDERTAKEN AND AUGER, LTD.**, Springfield Road, Chelmsford 4881, or evenings—Danbury 218.

THE CIVIL ENGINEERS' Depot for Generators can SUPPLY you with LIGHTING GENERATORS, TELESCOPIQUE STANDS, CABLES and GLOVES. **RYE-ARC, LTD.**, Plant Hire Division, Silvertown Works, North Woolwich Road, London, E.16. Tel.: Albert Dock 4381.

FOR SALE, GENERATOR, Lister Diesel Alternator Set, 400 230, 3-phase, 50-cycle, 20-kVA, complete with Switchboard and 500-gallon Storage Tank. Regularly serviced, £300 o.n.o.—**DEEKS AND STEERE, LTD.**, Godalming, Surrey. Telephone 1755.

SPARES WANTED, Set of good, reconditioned TRACKS for 1953 10RB. Also interested in other 10RB SPARES.—**SAVILLE-CALVERT (MACHINERY), LTD.**, Harvester House, Stratford-upon-Avon, Warwickshire. Telephone 4242.

LOW-LOADING ARTICULATED TRAILER for SALE, 25 to 40 tons, with 20ft. well.—**P. BATES, Sunnside Farm, Iveston, Leadgate, Co. Durham.** Telephone: Consett 359.

WANTED, One or Two **LOW-LOADING TRAILERS** with knock-out wheels, capacity about 12 tons. Details and price to Box E.1215. "The Contract Journal."

FOR SALE, 50-kVA General Motors, 27½-kVA and 18-kVA GENERATING SETS—**B.G. PLANT (SALES AGENCY), LTD.**, Watlington, Oxon. Watlington 44.

TIPPERS

Bedford, 5 cu. yd. Unregistered, low mileage. Guaranteed. Ex W.D. Prices £250-£340 each. Also Ford TIPPERS, 4D, 1955-56, £250.

G. R. YEOMANS, LTD.
Oxford Road, Ryton, Coventry.

SPEEDY SPARES SERVICE

JAP *Villiers*
PETTERS
Lister
ARMSTRONG SIDDELEY

GREENWICH 5633
DANDRIDGE'S
of GREENWICH
129-143 WOOLWICH RD., S.E.10

WAITING



... Obviously not OUR Customer!
RUSTON-SERVICE

EXCHANGE ENGINES INSTALLED IN ALL TYPES OF PLANT DURING WEEK-ENDS OR TO SUIT CUSTOMER'S CONVENIENCE

TILSLEY & LOVATT LTD.

ENGINE & PLANT DIVISION, NEWSTEAD TRADING ESTATE

TRENTHAM, STOKE-ON-TRENT, STAFFS

Telephone: Trentham 57331/3

Grams: "Diesel" Stoke-on-Trent

BEDFORD 5 cu. yd. TIPPERS. Unregistered. Ex M.O.S. Miles 4,000. Guaranteed. H.P. terms. Average price £310 each.

Bedford 15-h.p. UTILICONS. Unregistered. Ex M.O.S. Miles around 5,000. Written guarantee. H.P. terms. Average price £300.

Austin Long Wheelbase. Unregistered. Low mileage. Guaranteed. Average price £200.

JEEP ENGINES, bench tested. In cases. Guaranteed. £35 each.

G. R. YEOMANS, LTD.
Oxford Road, Ryton, Coventry.

NEW Ford, Trader, Diesel, TRACTOR R UNIT, fitted with 12-ton Low-loader B.T.C. Trailer, knock-out axle. Whole outfit brand new and unregistered. Available for immediate delivery. List price £2,289. Write for separate Terms and exchanges. **RICHARDSON'S (TRUGELEY) LTD.**, Ford Agents, Rugeley, Staffs. Telephone: Rugeley 451/21/3.

GUARANTEED used TRACTOR and CRAWLER SPARES for SALE. Always dismantling good tractors. Everything available: Tracks, Rollers, Sprockets, Tyres, etc. Terms C.W.O. Money back guarantee. 300 Tractors in stock.

SHELTON, Tractor/Crawler Spare Specialist, Westwood Farm, Bulby, Bourne, Lincs. Edenham 223/4.

CONVEYOR IDLERS, two-roll and three-roll. Troughing Idlers, made for 24in., 26in. and 30in. belt, by Huwold, ball-bearing oil-filled, mounted on metal sleeves, ready for fixing. All sizes, but slightly rusted by outside storage and offered at bargain prices.—**TIPROLL, LTD.**, Caldecote. Telephone: Neaton 2627.

FOR SALE, Huber 6-ton ROLLER SPARES, complete Engine, Framework, Gears, Wheels and Front Roller, etc. — Write Box E.1201. "The Contract Journal."

FOR SALE, 12RPH Paxman DIESEL ENGINE, B.G. PLANT (SALES AGENCY), LTD., Watlington, Oxon. Watlington 44.

WANTED URGENTLY: Single-cylinder Blackstone DIESEL ENGINE. CORNEILL & CO., Manchester. 13. RUSholme 1769.

GM

71 SERIES
GENUINE SPARES
COMPREHENSIVE STOCKS

40% OFF LIST PRICE

P.R.LOWE & CO. 28 GROVE RD., SUTTON, SURREY Tel: Merville 1839

FOR SALE

£2,000 WORTH of new Challenger III Spares, offered at two-thirds of original invoice price.

List on application.

THOMAS BOW, Lamartine St., Nottingham. Telephone: Nottingham 51701.

COACH SPECIALISTS
of the SOUTH

always have available a
Large stock of Good Used
PASSENGER VEHICLES
many with C.O.F.s

Ideal for conveyance of staff
Yearly Road Fund Tax £12.10.0

BEDFORD 26 str. Coaches from £75 or suitable for SITE OFFICES, from £50 A.E.C., LEYLAND, etc., 33/35 str. from £100

Let us demonstrate at your premises

E. J. BAKER & CO. (DORKING) LTD.

The Coach Works, Farnham Trading Estate, Farnham, Surrey. Telephone: 4626/7

CYLINDER HEADS—Caterpillar, International, Ruston, Diamond "T" B.M.C., A.E.C. Gardner, etc. perfectly repaired by our special "FUSION WELDING" process. All cylinder heads badly cracked. Finished, machined, tested, standard. Also Repairs to Crankcases, Sumps, Differentials, etc. Axles, rear and front, reconditioned. Exchange P6, R6, P4 Heads. Established 40 years. Satisfaction guaranteed.—**ANGEL AND WILLIAMS (PECKHAM), LTD.**, Summer Road, S.E.15. Telephone: ROdney 3559.

SPARES FOR SALE
10BD Muir-Hill Dumpers. C.P.T. Distributors. Blaw Knox 125.

List price less 40 per cent. discount for complete lots. Lists on application.

WILSON PLANT HIRE, LTD. Weedon Rd., Northampton. Tel.: Northampton 4653/4.

DISESEL ENGINES SERVICE EXCHANGE For Smith Excavators, Ingersoll, C.P.T. and other Compressors. Foden and E.R.F. Dumper and Tippers. Muir-Hill Dumper, etc. Diesel and Petrol Engines.

Field service available day and night.—**TILSLEY AND LOVATT, LTD.**, Engine and Plant Division, Stoke-on-Trent.

BRISTOL ANGLEDOZERS AND EQUIPMENT Immediate SPARES and REPAIR SERVICE for all models.—**H. A. SAUNDERS, LTD.**, Main Distributors, The Butts, Worcester. Telephone 6651.

YE-ARC, LTD., Albert Dock 4381. Safety first. New building regulations say it's imperative that all small tools be at 110-Volts output. Use our new STEP-DOWN TRANSFORMERS, input 230-Volts, output 110-Volts.

SCREEDS, TAMPERS, CRAWLER TRACKS to suit Barber-Green Finisher. Revised price list on request from manufacturers: R.D. AND M. ENGINEERING CO., Salford Lane, Dukinfield, Cheshire. Tel.: Ashton-under-Lyne 2871/2.

WANTED SPARES for Browning, Crane and General 407 Excavator.—**W. ELLIOTT AND SONS (YORK), LTD.**, Wetherby Rd., York. Tel. 78220.

WANTED, REPLACEMENT PARTS for all Crawlers, Tractors and Contractors' Plant. Write Box E.513, "The Contract Journal."

WANTED, up to 50 TIPPING LORRIES for work in South Wales area, minimum six months' contract.—**CROMWELL CO.**, Newport (59045), Mon.

USED SPARES IN EXCELLENT CONDITION One D6SR Caterpillar ENGINE, complete.

Caterpillar D2-4-6-8 TRACKS, ROLLERS, SPROCKETS, INTERMEDIATE, TD6-9-14-18 TRACKS, ROLLERS, SPROCKETS.

Allis-Chalmers HD7-10-14 TRACKS, ROLLERS, MAIN FRAMES, BACK ENDS, GEARBOXES, etc. always in stock.

SHELTON, Bulby, Bourne, Lincs. Tel.: Edenham 223/4.

SERVICE FOR
RUSTON & PAXMAN
ENGINES

Consult

Wheatley & Whiteley
99 KIRKSTALL ROAD, LEEDS, 3
Tel. 31122

MATHEW BROTHERS

ARE SO HELPFUL FOR

DIESEL GENERATING SETS
SALE OR HIRE
YOUR ENQUIRIES WELCOMED

MATBRO
GROUP OF COMPANIES

"Matbro" House, Beddington Lane, Croydon, Surrey.

THORNTON Heath 3402-3-4

EXCHANGE ENGINES INSTALLED IN ALL TYPES OF PLANT DURING WEEK-ENDS OR TO SUIT CUSTOMER'S CONVENIENCE

TILSLEY & LOVATT LTD.
ENGINE & PLANT DIVISION, NEWSTEAD TRADING ESTATE
TRENTHAM, STOKE-ON-TRENT, STAFFS

Telephone: Trentham 57331/3

Grams: "Diesel" Stoke-on-Trent

PLANT AND MACHINERY WANTED—FOR SALE—FOR HIRE

NEAGRON (CONSTRUCTION), LTD. OFFER FOR HIRE: NEALS QM 4/6-ton capacity MOBILE CRANES, Jibs from 24-60ft, high-duty pneumatics. NEALS 2-ton MOBILE CRANES, mounted on pneumatic tyres or crawler tracks. JONES KL44 3/4-ton capacity CRAWLER-MOUNTED CRANES, 24ft. Channel to 40ft. Lattice Jibs, with 10ft. jib tips. JONES Super 40 3-ton capacity CRAWLER-MOUNTED CRANES, with 30ft. and 40ft. Jibs. COLES and LORAIN 5/25-ton capacity LORRY-MOUNTED CRANES. LIMA 30-ton capacity CRAWLER-MOUNTED CRANE, 30ft. 80' 100ft. Jib with Hitch Gantry. First-class condition. CONCRETE MIXERS, 5/312, 7/5, 10/7, 14/10 and 21/14 cu. ft. capacity, Diesel-powered, high or standard discharge, with Integral Weighgear and Hopper Scraper. DUMPERS, Diesel, 1/4 cu. yd. capacity. COMPRESSORS, Lorry-mounted and Portable, with full equipments. ANT QUEEN Diesel MOBILE HOISTS, 7/10cwt. capacity, rated as required. EXCAVATORS, 10, 19, 24, 33 RBS and N.C.K. 304, with all equipments. 40ft. HANGING LEADERS for 19RB or 22RB Excavators, complete with all necessary fittings. DROPS and ALLIS-CHALMERS HD5G TRACTO-SHOVELS. CATERPILLAR and BRISTOL TRACTORS, all sizes. J.C.B. and DINKUM DIGGERS. ROLLERS, 6/12wt, vibrating, to 10-ton capacity. SHUTTERING, SCAFFOLDING, PROPS, ROAD-MATERIALS, etc. MONORAIL and EQUIPMENT. C.P.O.A.C. CONCRETE PLACER CHINOOK HEATERS immediately available ex London depot.

FURTHER DETAILS:
Abbey House, Victoria Street, London, S.W.1.
Telephone: ABBey 5152 (4 lines).

FOR SALE. Fork Lift TRUCKS, Conveyancers, Petrol, 4,000lb. solids, sound order. Two Reconditioned Priestman Wolf Type A TRACKS, 18in. grousers (66). ROSEFIELD SALVAGE CO., Dumfries. Telephone: ROSE 862 or 533.

FOR SALE. 10-h.p. Ruston Diesel LOCO, 2ft. gauge, Twin-cyl. Lister Engine. Really excellent condition, £1250. DUDLEY VALE, LTD., 3, Buckingham Place, London, S.W.1. VICTORIA 0252.

AVAILABLE FOR HIRE. 20/1300 Reich TOWER CRANE, with competent and experienced driver. Special rates for long hire.—RICHARDSON, Herbert House, Slade Green, Erith.

Rapid expansion has decreed us Greater London's Largest Fleet Owners of
1960 1 yd. "DROTT" SKID SHOVELS



Always available for Hire

Your personal contact: MR. RONALD GENT
Tel: THOrnton Heath 3402/3/4

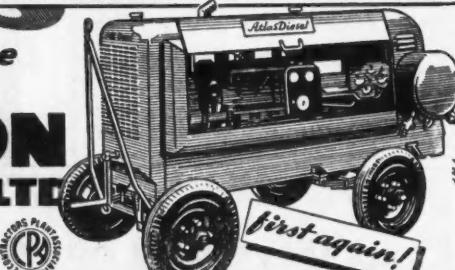
POWER PLANT HIRE (Beddington) LTD.
Beddington Lane, Croydon, Surrey

hire it from...
ABELSON

Tel: SHEldon 2424

ATLAS
DIESEL TWO STAGE PORTABLE AIR COMPRESSOR NT9-MV

obtained on hire
from
WILSON
PLANT HIRE LTD
Depot WEEDON ROAD
NORTHAMPTON
Phone 4653 and 4654



MOORE'S PUMP HIRE
Warsop Centrifugal and Wickham Diaphragm.

Tel:
TOTtenham
0401
(10 lines)

FOR SALE. TOWER CRANES, J. Weitz Model G12, complete with Rails and Skips, £800 each. TRENCH SIEVES, 10ft. and 12ft. £6 per ft. FIBREGLASS, 16in. 10ft. rolls, £12.6 per length. SAWBENCH, 16in., Electric, Universal type, £120. Stothert and Pitt 10/7 CB MIXER, Petrol, £85. FILE FLAME, 2-ton, 51ft., Sykes, £350. AIR COMPRESSORS, SH50, to 600 c.f.m., Petrol, Diesel and Electric. Price on application. CHASSIS, ex C.P.T. Compressors, £10 each. Priestman 33/27 HEAVY GRAB, 2-ton, £100. Priestman 17/14 HEAVY GRAB, 2-ton, £70. New MOBILE SITE OFFICES, fitted, from £350. CONCRETE PLACING SKIPS, 2 to 10 cu. yd. capacity. Maco PIPELAYING WINCHES, 1-ton to 2-ton capacity. ROADFORMS, 6in. to 10in. section. 41 new 9in. x 10ft. Standard ROADFORMS, complete with pins, 55/- each. M.E. ENGINEERING LTD., 457 Finchley Road, London, N.W.3. Telegrams: Mengilim, London. Phone: HAMpstead 7481-2-3.

A (not in chain of address) offer for SALE: One Ruston 19RB Diesel driven EXCAVATOR, 19900 Series, fitted Dragline Equipment, £1,095. One Ruston 19RB Diesel driven EXCAVATOR, 19000 Series, any one equipment, £3,725. One Ruston 22RB Diesel driven EXCAVATOR, new 1959, overhauled, fitted Face Shovel Equipment, £1,850. One Ruston 43RB Diesel driven EXCAVATOR, 15000 Series, fitted Dragline Equipment. In excellent condition, £8,250.

AIDU EQUIPMENT CO., LTD., 105-129 Markfield Road, Tottenham, N.15. Telephone: TOTTENHAM 0401 (10 lines).

FOR SALE. Buildmaster BDK250 TOWER CRANE, 1954, available April, 1960, at Liverpool, complete with 180ft. jib, including rail switchable, cable and 10ft. Jib Extension, all in good condition. Inspection by appointment, or details from Box P.1050, "The Contract Journal."

FOR SALE: 5-ton Steam CARGO WINCHES by Clarke Chapman, size 8in. x 12in., first-class condition, thoroughly overhauled. R. S. HAYES LTD., Jenkins Yard, Bridgend, Glam. Tel.: Bridgend 1311.

FOR SALE. 167 c.f.m. Broomwade Diesel-driven Portable COMPRESSOR, recently overhauled. WILLIAM G. SEARCH LTD., Whitehall Road, Leeds, 12. Tel: 639081 (10 lines).

FOR HIRE: 500 c.f.m. MOBILE COMPRESSORS.—Call E. M. SMITH AND CO., LTD., Warrington 33616.

SWEeper/Collectors

FOR HIRE

DAILY — WEEKLY — MONTHLY

Sound machines available
for re-sale

WALKERS MECHANICAL CLEANSING

LIMITED

ROCKINGHAM ROAD, MARKET HARBOROUGH

TEL: 3168

MODERN PLANT FOR HIRE, with experienced operators and backed by an efficient service organisation.

EXCAVATORS. 1 $\frac{1}{2}$, 3 $\frac{1}{2}$ and 1 $\frac{1}{2}$ cu. yd.

J.C.B. HYDRA-DIGGERS.

DUMPERS. 1 $\frac{1}{2}$ to 4 cu. yd., Diesel.

ROAD ROLLERS. 1 to 12 tons.

COMPRESSORS. Mobile and Portable, with every type of equipment.

CHASSIS & SHOVELS. 1 to 1 cu. yd.

ANGLEDOZERS. International and Fowler.

CONCRETE MIXERS. 5/312 to 14/10 cu. ft.

PUMPS. 11 $\frac{1}{2}$ in. to 6in., Diesel.

Earth Rammers, Hoists, Cranes, Mortar Pans, Kango Hammers, Roadforms, Traffic Lights, Scaffolding, and many types of Construction Plant.

HIRE. C. LEACH, LTD., 131 High Street, Cheshunt, Herts.

Tel: Waltham Cross 25161 (5 lines).

WELDING PLANT FOR HIRE.

Also

COMPRESSORS.

MOBILE CRANES.

LIGHTING PLANTS.

RYE-ARC, LTD., Plant Hire Division, Silvertown Works, North Woolwich Road, London, E.16. Phone: ALBERT Dock 4381 (10 lines).

FOR SALE: N.C.K. 304, with three equipments, Forward Shovel, Dragline and Backhoe. Thoroughly overhauled where necessary and in first-class condition.

PLANT SALES, LTD., 25 Castleragh St., London, W.1. PADDINGTON 2663/5.

AVAILABLE for immediate HIRE: 19RB and 10RB and 14/14 EXCAVATORS, all equipments. D7, TD18 and TD20 EXCAVATORS with Dozer and Scraper. Apply **TILBURY CONSTRUCTION CO. LTD.**, Ruscombe Works, Twyford, Berks. Tel.: Twyford 177 (4 lines).

FOR SALE. One Ransomes CALDOZER, little used, £220. Three CONCRETE MIXERS, 10/7 Fowlers, Petrol, unused, £115 each.

PLANT HIRE AND SALES, LTD., Millbrook Road, Southampton. Southampton 75271.

WANTED, a number of the following DIESEL ENGINES: Cummins H, Caterpillar D6, D7s and D8s. Also complete TD6 TRACTORS.—Please reply, with full particulars of condition, location and price required, to Box P.1053, "The Contract Journal."

TOWER CRANE for HIRE. Liebherr F25T, maximum lift 133ft., radius 75ft., load 2 tons, complete with track and sleepers.—JERRAM, Sandford Works, E.6.

DOE'S COLUMN

GRAND CLEARANCE SALE

10% off all prices quoted for used industrial machines during February.

1954 J.C.B. Hydraulic EXCAVATOR, on new remould 11 x 36 rear pneumatics and very good 750 x 16 fronts, powered by Ford 4D Diesel Engine, complete with Operator's Cab. Counterweight model. Complete with 24in. Backhoe Bucket. £1,095. 1955 J.C.B. Hydraulic EXCAVATOR, on very good 14 x 30 rear pneumatics and very good 750 x 16 fronts, powered by Ford 4D Diesel Engine, complete with Operator's Cab. Counterweight model. Complete with 24in. Backhoe Bucket. £1,095. 1954 J.C.B. Hydraulic EXCAVATOR, on new remould 11 x 36 and 600 x 19 pneumatics. Overhauled throughout and powered by a Ford 4D Diesel Engine, complete with 24in. Bucket and front-mounted 1 $\frac{1}{2}$ cu. yd. Hydraulic Loading Shovel. £850. April 1958, DINKUM MAJOR, mounted on new-type Fordson Major Diesel Tractor. Fitted with Cab, Has 18in. and 24in. Buckets and fitted with 3 $\frac{1}{2}$ cu. yd. Power Shovel. All in good working order. £1,750. 1958 DINKUM MAJOR Hydraulic EXCAVATOR, mounted on new-type Fordson Major Diesel Tractor. This Excavator has just had a new main Jib fitted and the slew post rebushed; also has a new rear wheel. The front-mounted Hydraulic Power Shovel is in good order and has just been fitted with a new crowd ram. The 14 x 30, 750 x 16 pneumatics are in good condition. £1,950. Late 1958 DINKUM DIGGER, Hydraulic Sprinkler with 24in. Bucket, powered by new-type Fordson Major Diesel Tractor, fitted with new giant 14 x 30 rear pneumatics and very good 750 x 16 fronts. Electric starting. Cab. This machine has been very carefully maintained and is in excellent condition. £2,000. 1955 DINKUM DIGGER, with 24in. Bucket, powered by new-type Fordson Major Diesel Tractor, fitted with good 11 x 36 and 600 x 19 pneumatics. Electric starting. Cab. Overhauled throughout, tested and resprayed and fitted with front-mounted Hydraulic Bulldozer. £950. 1954 DINKUM DIGGER, with 24in. Bucket, powered by new-type Fordson Major Diesel Tractor, fitted with very good 11 x 36 and 600 x 19 pneumatics. Operator's Cab with lights. Rebushed right through and fitted new engine. £950. 1954 DINKUM DIGGER, with 24in. Bucket, on new-type Fordson Major Diesel Tractor on good 11 x 36 and 600 x 19 pneumatics. Electric starting, and fitted with Skyline 10 cu. yd. front-mounted Hydraulic Loading Shovel. Overhauled. £795.

ERNEST DOE & SONS LTD., Ulting, Maldon, Essex.

Telephones: Day—Hatfield Peveril 311. Sales, Mr. Hall, works. Mr. Bennett, field service, Mr. Clayton, works. Mr. Woodham, Night—Sales, Hatfield Peveril 319; Service and spares, Hatfield Peveril 312.

PLANT AND MACHINERY WANTED—FOR SALE—FOR HIRE

CONTRACTORS' PLANT FOR HIRE.
EXCAVATORS, BULLDOZERS, 7-ton Diesel ROLLER, 2-ton and 5-ton MOBILE CRANES, MONORAIL TRANSPORTER EQUIPMENT, VIBRATORY ROLLERS, COMPRESSORS, MIXERS, PUMPS, etc.—Plant Dept., WM. TOWNSON AND SONS, LTD., Higher Swan Lane, Bolton. Telephone: Bolton 10140.

NARROW TRENCH BUCKETS to fit all machines. SALE or HIRE. The Norton Backacter Bucket designed by user digs harder material and emulsion more efficiently. Sizes: 1 ft. 6 in./2 ft. 6 in. IMMEDIATE DELIVERY. Other sizes in 10 days. Contact: NORTON PLANT HIRE, LTD., Ramsden, Billericay, Essex. Tel.: Ramsden Heath 365/16.

FOR COMPRESSOR HIRE SERVICE.—From 1-tool to 12-tool (70 c.f.m. to 625 c.f.m. f.a.d.). Lorry-mounted and Portable. Full range of Pneumatic Tools.—HUBERT C. LEACH, LTD., High Street, Cheshunt, Herts. Tel.: Waltham Cross (5 lines).

GOOD SELECTION of Builders' Plant, including 15-ton DUMPERS, RAMMERS, BULLDOZERS, VIBRATING ROLLERS, etc. Available by hire. Description and prices available from HIREPLANT, LTD., North Circular Road, Stonebridge Park, N.W.10.

FOR SALE. 1,500 TRENCH SHEETS, 10/12/14/ft. DUDLEY VALE, LTD.

3 Buckingham Place, London, S.W.1. VICTORIA 0252.

WANTED. CATERPILLAR D4, with or without equipment. Machine requiring track attention considered. Must be cheap. — Write Box P.1030, "The Contract Journal."

FOR SALE. New Single and Twin Diaphragm Lift and Force PUMPS, with Diesel drive.—WILLIAM G. SEARCH, LTD., Whitehall Road, Leeds, 12. Tel. 639081 (10 lines).

PINGON 454B TOWER CRANE, 3-ton, 49ft. radius, 1-ton 99ft. radius. Available immediately. HIRE or SALE.—Write Box P.1167, "The Contract Journal."

WANTED to BUY, Alien Oxford GRADER. HORTICULTURAL SERVICES, 89 Windsor Road, Southport, Lancs.

THWAITES 15cwt. and 1½yd. Diesel-driven DUMPERS, first-class condition and good tyres. W. V. DAVIES, Shipston-on-Stour. 'Phone 125.

DRAGON PLANT HIRE LTD.

Excavators, Bulldozers, Overloaders, Crawler-Cranes, Trenchers, Dumpers, Mixers, Pumps, Drott Shovels, Road Rollers, Scrapers, 10 ton Articulated Loader, etc.

FOR HIRE EVERYWHERE
RING GUILDFORD 67277

IMPORTANT PLANT AND VEHICLE SALE

By Order of the E. — — R. Secretary of State for War
Approximately

1,800 UNITS OF EARTH MOVING, ROAD MAKING & LIFTING PLANT, MOTOR VEHICLES, TRAILERS, MOTOR CYCLES, ETC.

also

70 LOTS OF PLANT SPARES including

Nine KOEHRING 304A EXCAVATORS (some rigged Crane and Backacter); RUSTON-BUCYRUS 43RB EXCAVATOR, with Dragline and Crowd Shovel Equipment; 10 RUSTON-BUCYRUS 10RB, base machines; CRANES by A.E.C., COLES, HYSTER, JONES, LORAIN, NEALS, RANSOMES AND RAPIER (some Lorry-mounted); 37 CRAWLER TRACTORS, ANGLED佐ZERS and BULLDOZERS by CATERPILLAR, including D4s, D7s and D8s; SCRAPERS; DUMPERS; CHASESIDE HI-LIFT SHOVELS; CABLE LAYING PLOUGHS; AVELING-BARFORD ROAD ROLLER; BEDFORD LEWIN SWEEPER; WORKSHOP TRUCKS fitted with S.S. and S.C. Lathes; 5.6-kVA GENERATING and BATTERY CHARGING PLANTS; TRAILER-MOUNTED FIRE PUMPS; WHEELED TRACTORS; STOTHERT AND PITT DIESEL CEMENT MIXER; HOLMAN TRAILER-MOUNTED AIR COMPRESSOR; BEDFORD 10-ton DIESEL TRUCK/TRACTOR; and

PLANT ANCILLARIES and SPARES by CATERPILLAR, BARBER-GREENE, BUCYRUS, GENERAL, HYSTER, JONES, etc. (including HYSTER D7N and D8N WINCHES); POWER CONTROL UNITS; DRAGLINE and SKIMMER BUCKETS; DIESEL INJECTORS; MANIFOLDS; TRACK ROLLERS; IDLER RECOL SPRINGS, etc.

also

280 SALOONS, LIMOUSINES and ESTATE CARS (JAGUAR Mk. IX SALOON (under 8,000 miles); HUMBER SUPER SNIPE TOURING LIMOUSINE (under 7,000 miles); and 111 FORD ANGLIAS, POPULARS and MORRIS MINORS); LAND-ROVERS; AUSTIN CHAMPS; UTILITIES; MOBILE CANTEENS; and LOAD-CARRYING and DUAL-PURPOSE VEHICLES of many types by leading manufacturers (many fitted with Diesel Engines); TRAILERS, 10cwt./10 tons; TANKERS, 100/2,500 gallons.

and

300 SOLO and COMBINATION MOTOR CYCLES.

To be sold by AUCTION at M.O.A. STORAGE DEPOT, RUDDINGTON, near NOTTINGHAM, on TUESDAY, WEDNESDAY, THURSDAY and FRIDAY, 15th, 16th, 17th, 18th MARCH, 1960, at 10.30 a.m. each day.

by

WALKER, WALTON & HANSON

in association with

TURNER, FLETCHER AND ESSEX and RICHARDSON AND LINNELL. For locations, viewing dates and times, see catalogue. Catalogues, price 1/- (P.O.s only) may be obtained from 1st March onwards from the Auctioneers' Offices, Dept. 2, Byard Lane, Nottingham. Nottingham 54272 (7 lines).

VALES PLANT REGISTER, LTD.
OFFER FOR IMMEDIATE SALE:
EXCAVATORS:

410 RANSOMES, 3/4, all equipment £650. 10RB, 10800, Skimmer and Backacter or Dragline, £900.

10RB, 19000 Series, Skinner or Backacter or Dragline, £1,950.

10RB, 22000 Series, Skimmer and Backacter. Very good condition, £2,500.

SMITH Super 10, new 1951, Dragline, Skinner and Backacter Cranes. Very good condition, £1,800.

19RB, 5/8, 11000 Series, Dragline and Skimmer and Backacter, £1,850.

19RB, 5/8, 17000 Series, Dragline, £3,850.

24RB, 5/8, 23000 Series, Price on application.

24RB, 5/8, 17000 Series, Dragline, £3,000.

33RB, 16000 Series, Dragline and Shovel, £5,050.

38RB, 16000 Series, F/S and Dragline, £9,250.

43RB, 15900 Series, Dragline, £7,950.

11000 Series, Equipment, 328110 Series, Cummins Engine, £3,000.

54RB, 22000 Series, late 1957, Dragline, £18,975 each.

FOR A COMPREHENSIVE LIST OF PLANT FOR SALE AND HIRE — SEND TO VALES PLANT REGISTER, LTD.

Further details: 14 Lower Grosvenor Place, London, S.W.1. VICTORIA 7531, 3501, 8080, 9886 (15 lines).

TRACTORS FOR SALE.

TD18, complete with RB Blade and 24 Winch. BTD6, complete with RB Blade.

Fiat SSL, complete with Angledozer.

Caterpillar D4, rebuilt as new, Birtley Dozer.

Allis-Chalmers Model WM, complete with Angledozer.

Allis 1070, complete with Bagger and Angledozer.

N. M. GREENE Kirby Underwood, near Bourne, Lincs. Tel.: Dowsey 285; (nights) Gosberton 305.

FOR SALE.

300-ton Eonit CEMENT SILO, £2,750.

TD9 DOZING EQUIPMENT, £275.

10/12-ton LOW-LOADER, £335.

IAN C. CRISP (PLANT HIRE), LTD., 117 Baldock Road, Letchworth (2394), Herts.

TARSLAG, LTD., MOBILE LIFTING SERVICES cover the whole country.—For service in the London area, write to 146 Grosvenor Road, S.W.1, or 'phone VICTORIA 0407.

FOR SALE. 3yd. Conder SCRAPER.—S.G. PLANT (SALES AGENCY), LTD., Watlington, Oxon. Watlington 44.

PRECAST CONCRETE SLAB AND KERB HYDRAULIC PRESS REQUIRED

Full details to ref. J.L.D.,
JAMES MILLER & PARTNERS LIMITED,
Pump Lane, Hayes, Middlesex

FOR HIRE and SALE: ARMSTRONG-WHITWORTH PNEUMATIC POKER-TYPE CONCRETE VIBRATORS.

We are distributors for all types of Armstrong-Whitworth Pneumatic CONTRACTORS' TOOLS, including Concrete Breakers, Light Picks, Clay Diggers, Rock Drills, Pumps, Backfill Rammers and Tamers, Hoses and Accessories. We hold a large stock of Spares and can give a 48-hour repair service. New and Second-hand Air Pumps COMPRESSORS for SALE. Send for list.

HUBERT C. LEACH, LTD., 131 High Street, Cheshunt, Herts. Tel.: Waltham Cross 25161 (5 lines).

FOR SALE.

1952 COUNTY CRAWLER, in sound working order, with Cab.

1955 BTDSO, new tracks fitted May, 1959, Cab, excellent machine.

T. H. WHITE, Devizes (380), Wilts.

RODGERS TRACK PRESS for SALE. Model 40.100. Serial No. 843072, trailer-mounted, with Allis-Chalmers Engine could be adapted for electric drive. In good order, very little used, ex M.O.S., £1,000.

W. HARROLD, Corpusty, Norwich. Phone Sixthorpe 242.

FOR HIRE. HD14 TRACTORS, with Dozers and/or 12yd. Scrapers; also 33RB Ruston EXCAVATORS.

1½ cu. yd., with Dragline or Shovel Equipment.

SAND AND SHINGLE, LTD., Faggs Road, Feltham, Middlesex. Tel.: Feltham 3045.

SALE or HIRE. 31-ton Vibro-Venken Trailer.

Type VIBRATING ROLLER, Diesel-driven, battery start. New November, 1958. Excellent condition.

DUDLEY VALE, LTD., 3 Buckingham Place, London, S.W.1. VICTORIA 0252.

WANTED. LUFFING SHOVEL CONVERSION for Priestman Brothers' Excavator.

SAVILLE-CALENT (MACHINERY), LTD., Harvester House, Stratford-upon-Avon, Warwickshire. Telephone 4242.

FOR SALE. Caterpillar D4 Crawler TRACTOR.

Model 2T, in excellent condition; Double Drum Winch if required. For full particulars, contact EARTHSTRIP, Wakefield Road, Hampole, near Doncaster. 'Phone: Adwick-le-Street 3166.

FOR SALE. David Brown DB50 Diesel-driven CRAWLER TRACTOR with Hydraulic Dozer.

WILLIAM G. SEARCH, LTD., Whitehall Road, Leeds, 12. Tel. 639081 (10 lines).

HAVE MONEY—WILL TRAVEL

If you have SURPLUS PLANT but prefer surplus cash—if you wish to sell but have no time for so-called agents—if you are satisfied with a reasonable price for your surplus plant—then contact, with date, condition and price:

FIELDS.

Forest Edge, Ringwood Road, Ferndown, Dorset.

WEATHERILL HYDRAULIC

F. E. WEATHERILL LTD

USED EQUIPMENT DIVISION

We can meet your Used Loading Shovel requirements either at our main Works at Welwyn Garden City or our Depots at Walsall, Manchester and West Hartlepool.

1955 WHITLOCK DOZALODA, fitted with 1½ cu. yd. Scoop, complete with lighting and driver's cab. £675.

1959 WEATHERILL Hydraulic LOADER, Type 12H, fitted with 1½ cu. yd. Scoop, powered by Fordson 4-cyl. Diesel Engine, 1400 x 24 rear tyres, and fully enclosed driver's cab. £1,300.

1956 WEATHERILL, Type 2HCRQ, with 1½ cu. yd. Scoop, powered by Fordson Diesel Engine. This machine has just been through a major service and repainted, tyres good. £1,150.

1956 WEATHERILL, Type 2HCRQ, with 1½ cu. yd. Scoop, powered by Fordson Diesel Engine, 1400 x 24 tyres at rear, all tyres in serviceable condition, reconditioned engine being fitted. £1,000.

1955 WEATHERILL, Type 2H, with 1½ cu. yd. Scoop, powered by Fordson Diesel Engine, front tyres 29 x 8, rear 1400 x 24. Choice of two. £700.

1957 MERTON OVERLOADER, with 1 cu. yd. Scoop with digger teeth, double-acting main rams, lighting equipment, tyres good. This machine in excellent condition. £1,200.

1958 CHASSSIDE HI-LIFT, with Fordson Diesel Engine, in good condition, tyres excellent. £2,000.

1958 SKYHI LOADING SHOVEL, ready to go to work. £1,750.

1958 WEATHERILL Hydraulic LOADER, Type 14H, front-wheel drive, 1½ cu. yd. Scoop, 10.50 x 16 steering and 1400 x 34 driving wheels, driver's cab and towing hitch. £1,200.

Ask for fuller details of these and other machines from our most comprehensive stock.

F. E. WEATHERILL LTD

USED EQUIPMENT DIVISION

Tewin Road, Welwyn Garden City, Herts.

Tel: Welwyn Garden City 4221-5

★ Further Classified Plant Advertisements on pages 893-900

PLANT AND MACHINERY WANTED—FOR SALE—FOR HIRE

SLOGGETTS (ENGINEERING) CO., LTD.
FOR IMMEDIATE HIRE:
COMPRESSORS, TRACTORS, DINKUM DIGGERS;
DOZERS, CALDOZERS; CRANES; ROAD ROLLERS;
FLOOR CENTRES; Acrow PROPS; PAINT SPRAYERS;
MOBILE SITE OFFICES; PUMPS; HOISTS, 8/15cwt.;
ROADFORMS, SITE TO 10ft. Light and Heavy Section;
All CONTRACTORS' PLANT, long or short hire.
2 Burtons Road, Hampton Hill, Middlesex.
Telephone: Teddington Lock 1138/9.

DEMAG Diesel PILE HAMMERS
HIRE your machines from Britain's largest fleet.
Models DS, D12 and D22 available with rope suspended
leaders and leg guides. Suitable for any section of pile.
DUDLEY VALE LTD.

3 Buckingham Place, London, S.W.1. Tel: VIC. 0252.

FOR SALE, new and used Bristol CRAWLER TRACTORS, with Angledozer, Loading Shovels and Trench Diggers. Demonstrations and full obligation from the Main Dealer, H. A. SAUNDERS, LTD., 14-20 The Butts, Worcester. Telephone 6651.

REMEMBER that PLANT SALES have the finest fleet of Heavy-duty Lima CRANES for HIRE. Consult them about your craneage problems.
PLANT SALES LTD.

25 Castlereagh St., London, W.1. PADdington 2663/5.
FOR HIRE IN THE MIDLANDS: 10-ton Lorry-mounted CRANES. Jibs to 75ft.—L. NELSON AND CO., LTD., Lugtrout Lane, Solihull, Warwickshire. Telephone: Sheldon 4005.

KINGSTON PLANT HANWORTH · MIDDX.
FOR 19 R.B. EXCAVATORS AND
ALL PLANT HIRE
FELTHAM 4084

FOR HIRE
CONTRACTORS'
PLANT
AND LOW
LOADING
VEHICLES
OF ALL TYPES
AND SIZES

A. E. FARR (Plant Hire) LTD

WESTBURY · WILTS · Tel: 356 (5 lines)

Ernest Doe
ULTING MALDON ESSEX
AND SONS LTD
SOLE DISTRIBUTORS IN 11½ COUNTIES

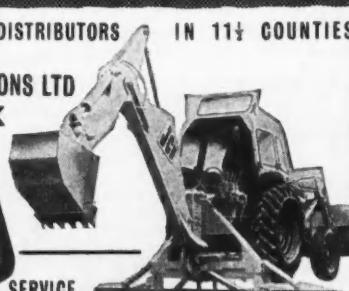
Telephone:

HATFIELD PEVEREL 311

(Night 319)

TRADE SUPPLIED

SALES SPARES



Winget 3/2 cu. ft. to 14/10 cu. ft.

MOORE'S MIXER

HIRE

Tel:
TOTtenham
0401
(10 lines)

AIDU (note change of address) offers for SALE:
One Weatherill 2HM Hi-Tip Hydraulically operated
Diesel driven LOADING SHOVEL. New 1955.
Overhauled, £685.
One Weatherill 2H Hydraulically operated Diesel driven
LOADING SHOVEL. New 1954. Overhauled,
£625.
One Weatherill 2HHC Hi-Tip Hydraulically operated
Diesel driven LOADING SHOVEL. New 1958.
Overhauled, £1,150.
One Weatherill 4HTW Hydraulically operated Diesel
driven OVERLOADER. New 1955. Overhauled,
£650.

AIDU EQUIPMENT CO., LTD.
105-129 Markfield Road, Tottenham, N.15.
Telephone: TOTtenham 0401 (10 lines).

SLOGGETTS (ENGINEERING) CO., LTD.
Large quantity of ROADFORMS, most sizes, now
available for HIRE. Contact us for HIRE of all types
of CONTRACTORS' PLANT.

2 Burtons Road, Hampton Hill, Middlesex.
Telephone: Teddington Lock 1138/9.

CATERPILLAR 977 TRAXCAVATOR for SALE.
Serial 20A. Offered subject to prior sale and
inspection. £5,635. — JAW BONE WORKS, Wood
Lane, Rothwell, Leids. Tel: Rothwell 3258.

ATLAS Tractor-mounted Single-tool COMPRESSOR.
Just completely overhauled, with or without
Ferguson Diesel Tractor.—W. V. DAVIES, Shipston-on-
Stour. 'Phone 125.

Call
"WESTERN"
for
HIRE or SALE

ALL SIZES AND TYPES

**The WESTERN
HIRE CO. LTD.**

Canal Yard, Hayes Road, Southall,
Middlesex. Southall 5601/2



NEAL'S (PLANT HIRE) LTD
SERVE THE SOUTH

Immediately available for hire on the
South Coast:—

Excavators, Tracto-Shovels,
Mobile Compressors,
Fergusons, Mobile Cranes,
10 BD 3 c.y. Diesel Dumpers,
Petrol and Diesel Rollers,
Concrete Mixers, etc., etc.

All enquiries promptly dealt with
Phone - - - Chichester 3777-8-9

FOR SALE OR HIRE
Bristol OVERLOADERS and BULLDOZERS, new
and reconditioned.
Barford DUMPERS and MIXERS.
Portable Diesel AIR COMPRESSORS.
C. AND A. PLANT SERVICES, LTD., 202-212 Head
Grove, Rusholme, Manchester, 14. Tel: RUS. 7291.

LIEBHERR TK14 TOWER CRANE, lift
35cwt. at 16ft. 3in. radius and 161/2cwt. at 52ft.
Jules Verne G12 Diesel, 100hp, 14ft. 6in. radius, lift 50cwt.
at 19ft. 6in. radius and 15cwt. at 52ft. 6in. both
lying Yorkshire and suitable for 400/3/50 voltages.
WILLIAM G. SEARCH, LTD., Whitehall Road,
Leeds, 12. Tel: 639081 (10 lines).

FOR SALE, Several Miles 2ft. gauge LIGHT
RAILWAY, Points, Turntables, Bends, etc., with
or without Steel Sleepers. 20 Sided-trucks 16ft. long,
Locos. (Ricardo Diesel Engine).—SHELTON, Bulby,
Bourne, Lincs. Tel: Edenham 22374.

FOR SALE, CATERPILLAR D2, fitted wide gauge
tracks and Angledozer equipment.—O. V.
JAMES AND CO., Contractors, Glastonbury-on-Wye.

FOR SALE, 2½-ton Aveling GB1 Diesel and 8/10-ton
ROLLER.—B.G. PLANT (SALES AGENCY), LTD.,
Watlington, Oxon. Watlington 44.

FOR SALE, 2-ton MOBILE CRANE, powered by
SLW Gardner, rough condition.—G. H. WATKINS,

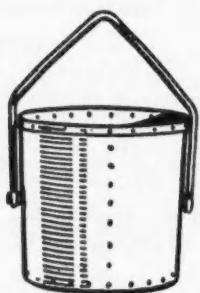
Crown East, Worcester.

FOR LIMAS
PLANT SALES LTD.,
25 CASTLEREAGH STREET, LONDON, W.1
Telephone: PADdington 2663-4

ACROW DEMAG HOISTS
FOR SALE

London : AMBASSADE 3456
BIRMINGHAM AREA : Walsall 6086
BIRMINGHAM : Brierley Hill 62544
SOUTH WALES AREA : Penarth 57388
GLASGOW : Bridgeton 1041
LEEDS : Leeds 76514
LIVERPOOL : Aintree 7335
MANCHESTER : Deansgate 7054
NEWCASTLE : Newcastle 9403
EAST COUNTIES AREA : Saffron Walden 2552
SOUTHAMPTON AREA : Locks Heath 3021
ACROW (ENGINEERS) LTD.

ABELSON
TIPPING SKIPS
2½ cu. ft. to 2 cu. yd.



Prices and details from:

ABELSON
E. CO., (ENGINEERS) LTD.

SHELDON · BIRMINGHAM 26

Phone: SHEldon 2424 (10 lines)
Grams: ABELSON, BIRMINGHAM
ALSO AT LONDON & MANCHESTER

PLANT HIRE



FOR THE PICK OF THE PLANT
AND THE KEENEST SERVICE...
ring GREENHAM PLANT HIRE NOW!

Isleworth 1141 London • Tottenham 6803 London • Aldridge 52861 Birmingham
Atherton 1114 Manchester • Central 3428 Liverpool • Airdrie 2070 Scotland
Ashton-under-Lyne 4312

THE

GREENHAM

GROUP

A COMPLETE SERVICE FOR BUILDERS AND CONTRACTORS

GREENHAM PLANT HIRE LTD. LONDON · BIRMINGHAM · MANCHESTER · LIVERPOOL
ASHTON-UNDER-LYNE · AIRDRIE, SCOTLAND

GREENHAM EQUIPMENTS LTD. LONDON VIKING 3651

GREENHAM TOOL CO. LTD. LONDON ISL 4422 · BIRMINGHAM Aldridge 52881

GREENHAM SAND & BALLAST CO. LTD. LONDON FEL 2285

GREENHAM TYRE CO. LTD. LONDON HOU 7231

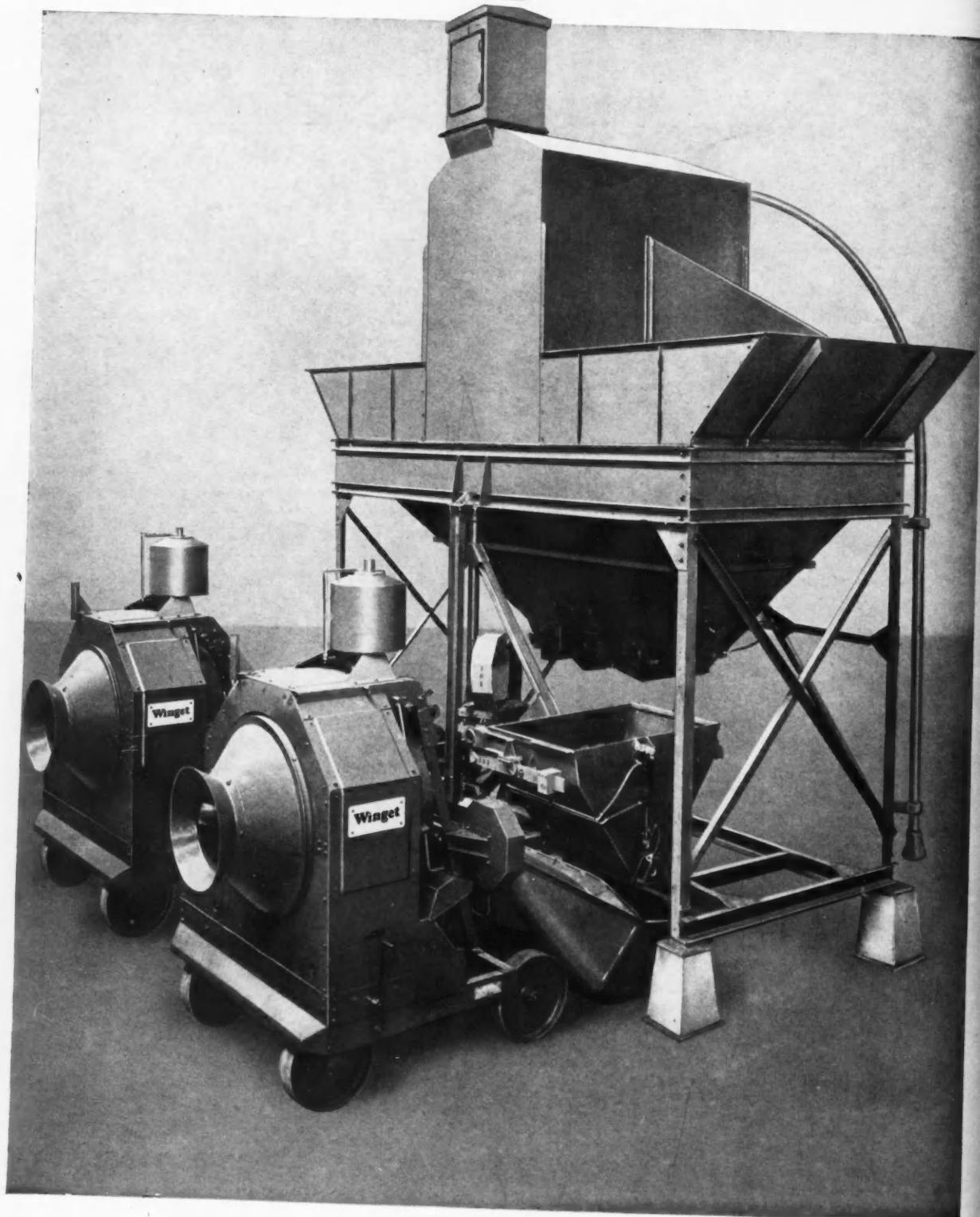
GREENHAM (EAST AFRICA) LTD. P.O. Box 3363 Nairobi, Kenya, B.E.A.

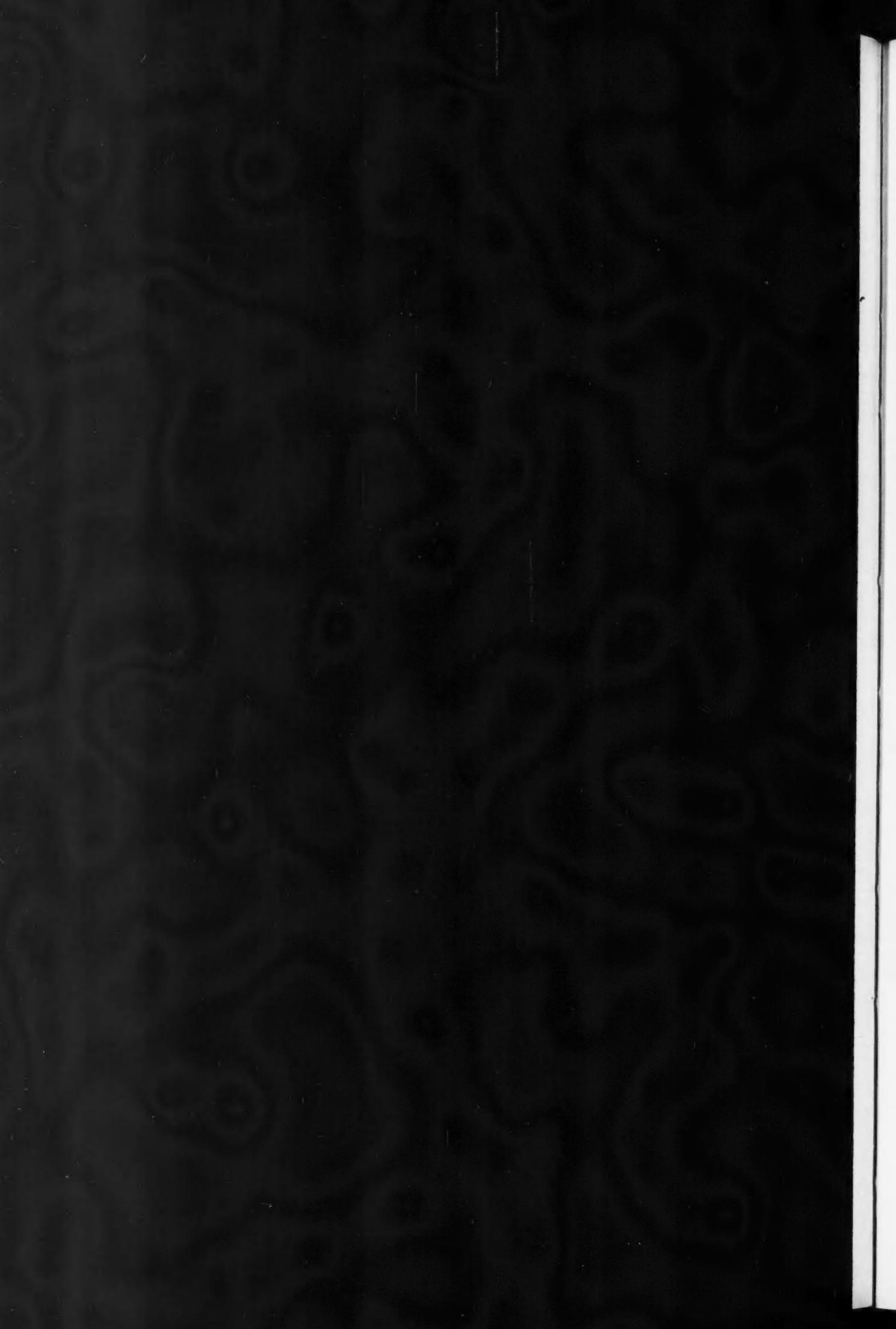
THE GREENHAM ORG



FOR GOOD SERVICE

THE Winget GROUPED





-WEIGHING POLYBATCHER

WEIGHS AND BATCHES UP TO 4 AGGREGATES AND CEMENT

FEEDS UP TO TWO $\frac{1}{2}$ -cu. yd. MIXERS

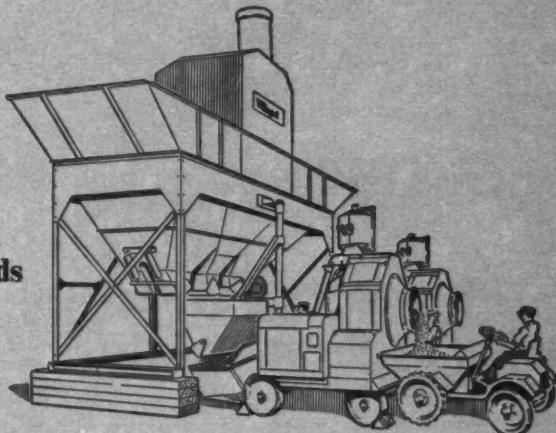
— WITH ONLY ONE OPERATOR !

Accurate Beam-scale weighing

Adjustable Bin layout

Wide choice of Bin loading methods

Choice of cement capacities



The Polybatcher with two Winget 14 NT/R Reversing Drum Non-tilt Mixers forms the cheapest and most economical transportable 1 cu. yd. Batching and Mixing Plant available.

WINGET 'WATCH-DOG' SERVICE

When you buy Winget plant you get the finest equipment modern science can produce, backed by an unparalleled Service organisation. Over fifty years of experience have produced not only the widest range of the most up-to-date plant, but also the most efficient means of taking care of it.

Seven main depots and thirty-two Service agents network the country bringing all Winget plant within easy reach of full spares and service facilities.

Send for Leaflet No. 227 for full details of Winget "Watch-dog" Service, Depots and Hire Fleets.

Winget
watchdog service

Don't let
idle
machines
steal
profit!

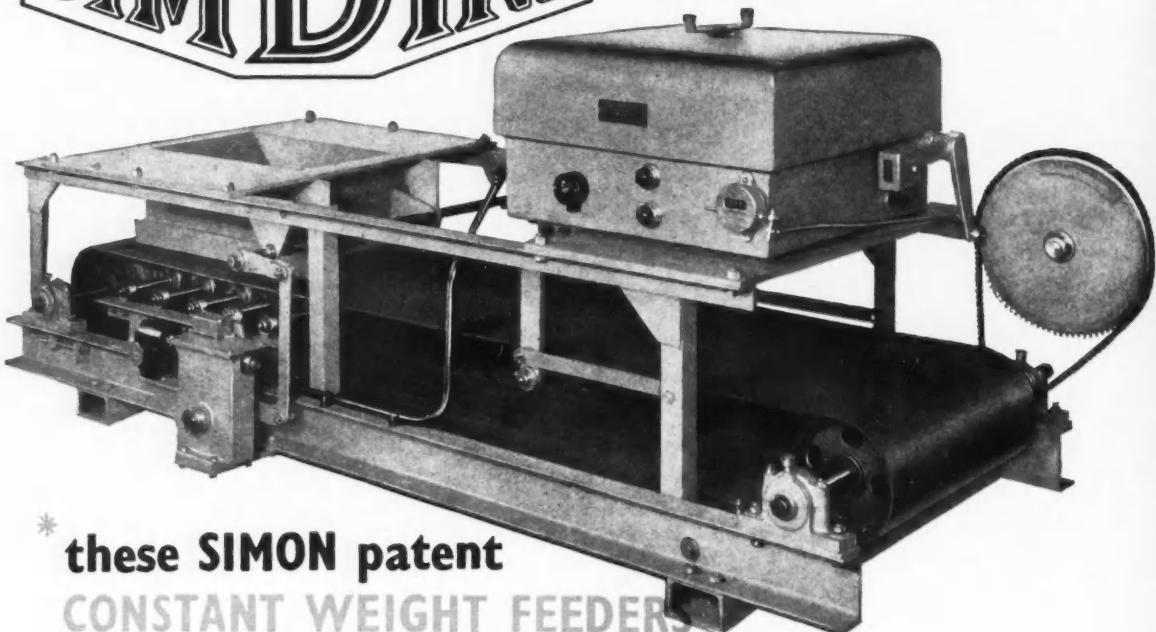


WINGET LIMITED Rochester Kent Tel: Strood, Kent 7276 (5 lines)





READY MIXED CONCRETE PLANT
CIVIL ENGINEERING PLANT



* **these SIMON patent
CONSTANT WEIGHT FEEDERS
are the electro mechanical brains
which are built into the**

**SIMDINE
CONTINUOUS
BATCHING
and
MIXING PLANT**

for the Ready mixed Concrete and Civil Engineering Industries. Designed to deliver a continuous flow of materials at any desired rate per hour irrespective of any alteration in bulk density or changes in the ability of materials to flow

- * **NO WEIGH LEVERS TO PULL!**
- * **NO WEIGH BUTTONS TO PUSH!**
- * **TOTAL ELIMINATION OF
HUMAN ELEMENT IN WEIGHING!**

WRITE NOW
FOR FULL DETAILS
OF THIS RANGE OF PLANT
FROM



**CHELSEA STREET
NEW BASFORD NOTTM.
tel. NOTTM. 77731**

600

PINON

*The best
and most
Comprehensive
Range of
Tower Cranes
in Gt. Britain*

Sole Selling Agents
in the
United Kingdom

Capacities 5 cwt to 15 tons

GEORGE COHEN

SONS & COMPANY LIMITED

WOOD LANE, LONDON, W.12

Tel : Shepherds Bush 2070

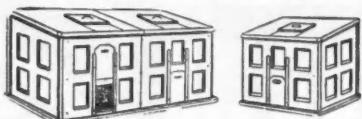
Grams : Omniplant, Telex, London

And at Stanningley (nr. Leeds) Kingsbury (nr. Tamworth),
Manchester, Glasgow, Swansea, Newcastle, Belfast, Sheffield,
Southampton, Bath.



"CASTLE" COAL BUNKERS

IN HIGH GRADE REINFORCED CONCRETE
PROMPT SERVICE BY OUR OWN TRANSPORT
Special competitive prices for collection ex our works



Constructed to Standards Required by Councils and
Main Contractors throughout the British Isles

BULK DELIVERIES MADE WITHIN 24 HOURS OF ORDER

Write or telephone

THE CASTLE MOULDED PRODUCTS Co. Ltd.
HETHERSETT • NORWICH • NORFOLK
Telephone: Hethersett 359 or 331



Size	Height	Rising to
0	1' 6"	2' 9"
1	2' 6"	4' 3"
2	3' 6"	6' 0"
3	4' 6"	8' 0"

Also available in special sizes to suit
customers' requirements.

All Plant Fully Guaranteed to
meet our Specification.

The finest on the market today –
and the keenest prices in the field

Full details from the actual Manufacturers:
AUDAX, CENTRAL AVENUE, WEST MOLESEY,
SURREY Telephone: Molesey 6071 (5 lines)

**ADJUSTABLE
TRESTLES**

Telephone: GRA 3401-8

**ARTHUR FOSTER
CONSTRUCTIONAL ENGINEERS LTD.**
STEVENAGE ROAD, EAST HAM, E.6

**SPECIALIST IN HANDLING
AND LIFTING ALL TYPES OF
PLANT AND MACHINERY**

PUMPS

**SIGMUND 2½" Centri-
fugal Pumps 220 g.p.m.**



Powered by Morris
4-cyl. 8 h.p. petrol
engine.

As illustrated, Store soiled, £60 each

BROADBENT BROS. (NOTTM.) LTD.
DALESIDE ROAD, NOTTINGHAM

Telephone: NOTTINGHAM 53927

**AND NOW
THE ALBOROUGH
SLIDE OVER**

The Alborough Slide-over Door is made of hot-dipped galvanised steel laths, steel-welded and riveted. A pleasing appearance is combined with maximum strength, lightness and durability.

The range of standard sizes will meet most requirements; there are no complications in fixing beyond some slight adjustments of door frames.

Here at last is the perfect Garage door—and it's an Alborough construction designed to eliminate one-hand operation in all weathers. It can be raised and lowered almost at a touch. This manipulation-case is due to its ball-bearing slide-over action which swings the door up and down without effort.

Alborough

A.B.C.D. (RAYNES PARK) LTD.
34/35 ALPHA ROAD,
SURBITON, SURREY
Tel: ELMbridge 6591/3

 **RELY ON**

WILLIAM JONES LTD.

**PLANT HIRE
SERVICE**



C. & A. PLANT SERVICES LIMITED, MANCHESTER
SALES—BRISTOL EARTH-MOVING EQUIPMENT

**Machines Available Immediate
Delivery.**

**First-Class Spares and
Service Organisation.**

**Sole Main Area Dealers and
Stockists.**



COMPREHENSIVE

HIRE FLEET

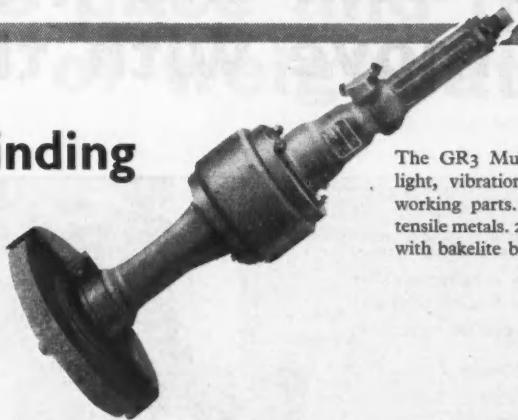
COMPETITIVE RATES.

WRITE FOR A FREE DEMONSTRATION on your own site—without obligation—to this address
202-212 HEALD GROVE, RUSHOLME, MANCHESTER, 14.

Tel: RUSHolme 7291/5.

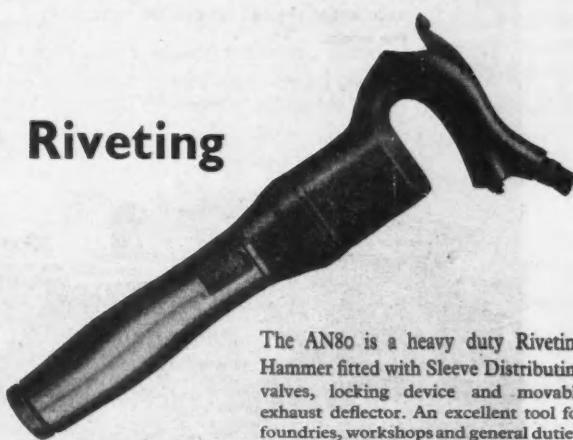
Tools to cut your costs

for Grinding



The GR3 Multi-Vane Grinder is compact, light, vibrationless and has a minimum of working parts. Fast cutting speeds on high tensile metals. 25 to 40% increased production with bakelite bonded wheels. A reliable tool.

for Riveting



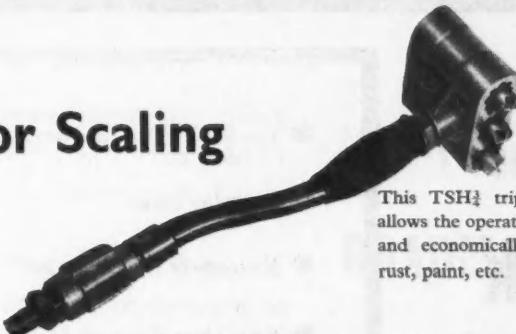
The AN80 is a heavy duty Riveting Hammer fitted with Sleeve Distributing valves, locking device and movable exhaust deflector. An excellent tool for foundries, workshops and general duties.

for Chipping



The DX5 Chipping & Caulking Hammers cover all normal requirements from heavy chipping to scaling. Designed for maximum performance, minimum air consumption and fatigue on operator.

for Scaling



This TSH $\frac{1}{2}$ triple headed Scaling Hammer allows the operator to cover large areas quickly and economically. Effectively removes scale, rust, paint, etc.

Speed work — Cut costs with

“BROOMWADE”

Air Compressors & Pneumatic Tools

YOUR BEST INVESTMENT

BROOM & WADE LTD., P.O. BOX No. 7, HIGH WYCOMBE, ENGLAND

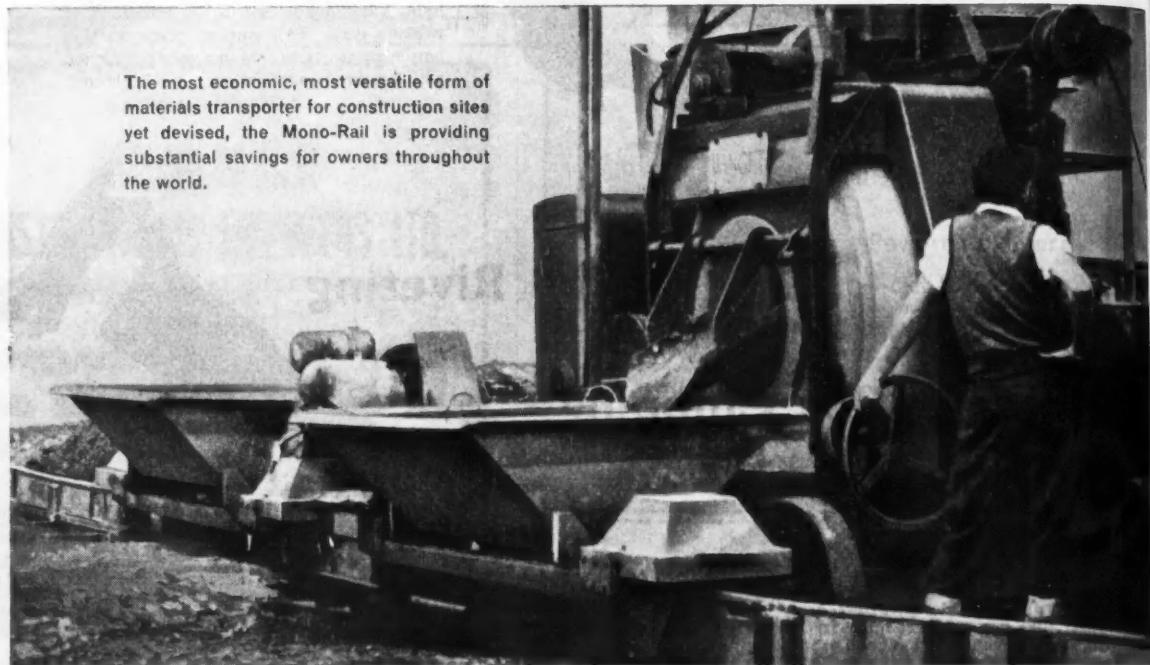
Telephone : High Wycombe 1630 (10 lines)

Telegrams : "Broom", High Wycombe (Telex)

714 SAS

The modern way to move with the mono-rail move with the times

The most economic, most versatile form of materials transporter for construction sites yet devised, the Mono-Rail is providing substantial savings for owners throughout the world.



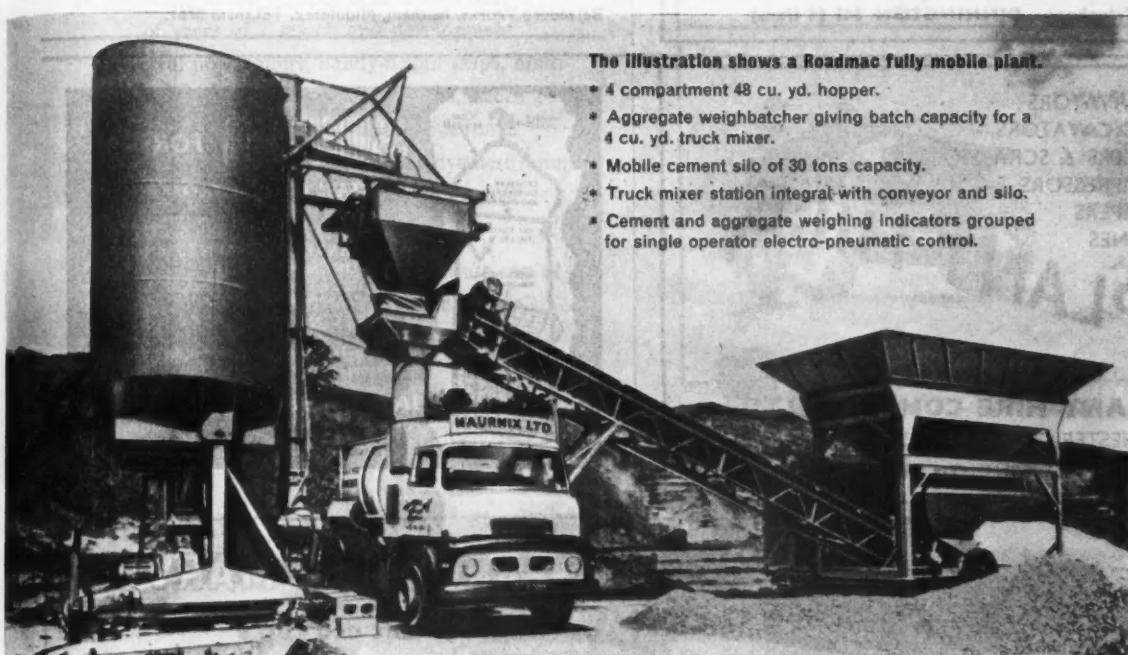
just
look
at
these
features

- * Easily and quickly laid down
- * Needs no driver
- * No roads or runways to lay
- * Rides clear of uneven ground, mud and water
- * Stops automatically wherever required
- * Discharged by one man
- * Ideal for big jobs, small jobs, all jobs

write for fully illustrated booklet **TODAY**

to handle concrete

raise the pace and quality of weighbatching



The illustration shows a Roadmac fully mobile plant.

- 4 compartment 48 cu. yd. hopper.
- Aggregate weighbatcher giving batch capacity for a 4 cu. yd. truck mixer.
- Mobile cement silo of 30 tons capacity.
- Truck mixer station integral with conveyor and silo.
- Cement and aggregate weighing indicators grouped for single operator electro-pneumatic control.

"Mobile Ready-mixed Concrete plant"
(reproduced by permission of F. A. Hunnable & Son Ltd.)

Roadmac have a greater range plus speed, efficiency and economy. They are designed for smooth, streamlined operation on all weighbatching jobs.

Either *mobile*, *portable* or *static*. This range is built on the *unit construction* principle; to give speed of erection.

One operator can deliver from 30 to 180 cu. yds. per hour automatically, semi-automatically or by manual control.

there's a

ROADMAC Batcher

for every

weighbatching job



(Member of the Muir Robb Group of Companies)

ROAD MACHINES (DRAYTON) LTD

Road Machines (Drayton) Limited West Drayton Middlesex

Tel: West Drayton 3721 Grams: Roadmach West Drayton

SP 5825

BUSES AND COACHES SUITABLE FOR CONVEYANCE OF STAFF

29 Seater Petrol Engine Coaches from £95
33/35 Seater Diesel Engine Coaches from £125
Buses for Mobile Canteens & Offices from £35

PLEASE LET US HAVE YOUR ENQUIRIES

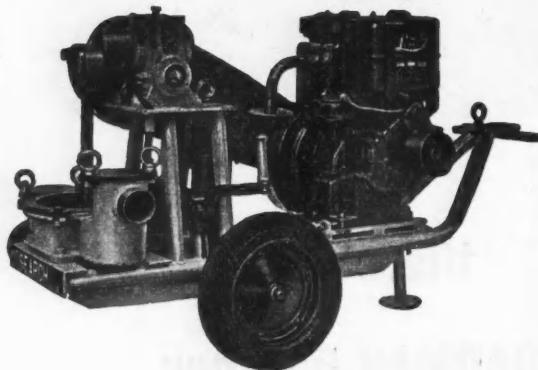
KIRKBY & SONS (SALES) LTD.
CROSS ROADS GARAGE, SOUTH ANSTON,
NR SHEFFIELD

Telephone: DINNINGTON 541 (4 lines)

- EXCAVATORS
- TRAXCAVATORS
- DOZERS & SCRAPERS
- COMPRESSORS
- DUMPERS
- CRANES

PLANT HIRE

**WILMSLOW
PLANT HIRE COMPANY LTD.**
MANCHESTER ROAD • WILMSLOW • CHESHIRE
TEL: WILMSLOW 3421 & 3542



NEW HUTS at old prices



Huts of all popular sizes at very low prices, yet of unsurpassed quality, are now available for discerning contractors; these prices are made possible only because of the large quantity available for immediate use from stock. Woodwork is PLANED ALL ROUND to give a handsome appearance in addition to long service.

Buy at today's lowest prices. For full details write or phone:

PANEL-LASTIC CONSTRUCTION CO., LTD.
Belvedere Works, Feltham, Middlesex. FELtham 5761.



SIEBER FOR

A '7 STAR' LOGICAL CLOAKROOM

- * SAVES SPACE
- * PRESERVES GARMENTS
- * ENSURES HYGIENE
- * REDUCES ABSENTEEISM
- * AIRS AND DRIES WET CLOTHING
- * MEETS NEW FACTORY ACT

Installed in Factories, Stores, Offices, Swimming Baths etc., throughout the country.
JAMES SIEBER Equipment Co., Ltd.
Africa House, Kingsway, London, WC2
Tel: HOLborn 4531/5121

SEARCH MUD MARVEL

Lift and Force 3 in. DIAPHRAGM PUMP

Handles Water, Mud, Sludge, Sewage, Tannery and other Industrial waste. Non-clogging ball valves; fully guarded V belt drive; Strong Tubular Frame. Lister petrol or diesel engine. Designed for continuous operation.

WILLIAM G. SEARCH LIMITED
WHITEHALL RD. LEEDS 12 Tel: LEEDS 639081 (10 lines)

**MODERN FLEET OF CONTRACTORS PLANT NOW
AVAILABLE FOR HIRE IN THE LONDON AREA!**

JACK BRANCH (LONDON)

OFFICE:
293 BALLARDS LANE • FINCHLEY • N.12
Phone: HILLside 5048-9
Plant Manager: Mr. E. G. H. Parnell

CAMBRIDGE OFFICE:
Phone WATERBEACH 57

ROYSTON OFFICE: Phone: ROYSTON 3007

WARRINGTON
Phone: PENKETH 2095

Tough Triplo

DIESEL DUMPERS

BY JOHNSON

Bringing the famous Johnson reliability and performance to the dumper field is the result of years of research and development. Powerful power units, handy-height skips, multi-speed gear boxes, simple controls, steering that is almost unbreakable—all these features are combined to give you go-anywhere dumpers whose rugged construction ensures years of trouble-free service.

We would be happy to demonstrate any of these dumpers on your site without obligation.

ONE/TWENTY Articulated Chassis Rear Wheel Drive
CAPACITY: Wet level 14 cu. ft. Alternative skip 16 cu. ft. Heaped (both skips) 24 cu. ft. payload 1 ton. Loading height (front lip) 39".



Service and spares within 24 hours

JOHNSON

QUALITY PAYS

C. H. JOHNSON (Machinery) LIMITED
STOCKPORT · CHESHIRE

Telephone: Stockport 2642/5 Telex: 66-297
Telegrams: "Machinery" Stockport

LONDON SALES AND SERVICE DEPOT:
38/44 Lower Richmond Road, London, S.W.14

Telephone: PROspect 7671

SCOTTISH SALES AND SERVICE DEPOT:
55 Arrowsmith Avenue, Glasgow, W.3
Telephone: Scotstoun 6933

Sole U.K. Distributors for A.B.G. road making machinery

ONE/THIRTY-FIVE

A reliable medium size dumper.



CAPACITY: Wet level 16 cu. ft. Heaped capacity
— at 25° — 27 cu. ft.

TWIN/SIXTY-FIVE

The only dumper in its class with a 3½ ton drive axle and payload of 55 cwt.

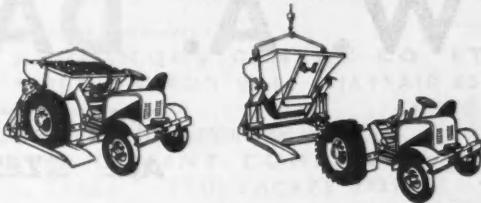


CAPACITY:
20.8 cu. ft. wet
— 40 cu. ft. heaped

JOHNSON TRIP-SKIP



JOHNSON TRIP-SKIP BRINGS YOU AUTOMATIC MULTI-SKIP HANDLING WITH STANDARD JOHNSON DUMPERS



This new Johnson unit solves many site problems, such as speeding the transportation of materials as various as concrete, bricks, spoil or rubble either into or out of the crane's operating radius.

CONTRACTORS' SHOVELS



*Any type of Handle
Supplied.*



★ Made from the best materials available and manufactured by Black Country Craftsmen.

Catalogue and Prices on request.

THE PHOENIX SHOVEL Co. Ltd.
CRADLEY HEATH · STAFFS

SUBLET YOUR
**STEEL
SHEET
PILING**

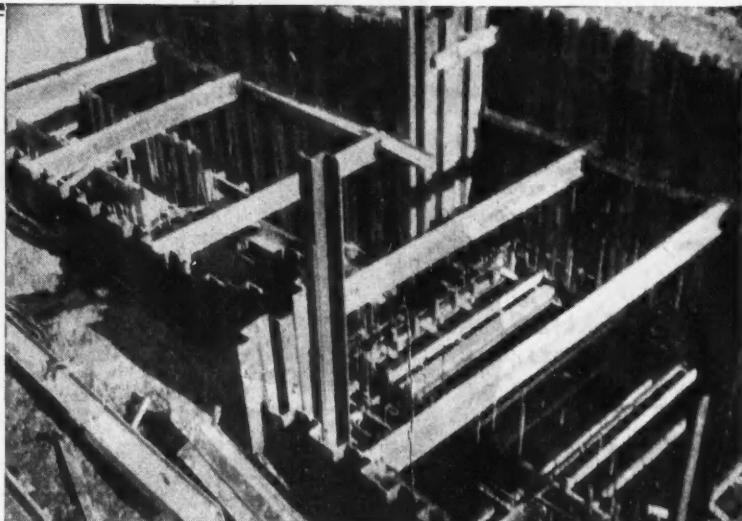
TO

W. A. DAWSON LTD.

SPECIALIST EQUIPMENT FOR
ALL SIZES ON CONTRACT

SUNDON PARK, LUTON

LUTON 52203



UNDERWATER
**CONTRACTORS
AT YOUR SERVICE**

DIVING SERVICES LTD. Experts in Marine Public Works. Also in Cutting Steel and Timber, Ship Repairs, Surveys, Blasting, Cylinder Sinking, Piers, Outfalls, etc. Any underwater Work undertaken.

Glenmore · Sugden Road · Thames Ditton · Surrey
Telephone: EMBERbrook 2039

There is no better medium than

THE CONTRACT JOURNAL

for small classified advertisements

Telephone for lineage rates to

WATERLOO 3411

LAFARGE ADD TO THEIR RANGE
OF SPECIAL CEMENTS-

FRODINGHAM

THE BRITISH MADE

SUPER-SULPHATED CEMENT



*for Safe concrete in
Aggressive Conditions*

FRODINGHAM

**SUPER
SULPHATED**

CEMENT

TRADE MARK

HIGHLY RESISTANT TO SULPHATES
As recommended for Class III conditions in
B.R.S. Digest No. 31

HIGHLY RESISTANT TO
MANY ACIDIC CONDITIONS

HIGHLY IMPERMEABLE

A LOW-HEAT CEMENT PARTICULARLY
SUITED TO MASS CONCRETE WORK

BRITISH MADE, THEREFORE
COMPETITIVE IN PRICE

CONSISTENT IN QUALITY

Further information from Main Distributors:-

LAFARGE ALUMINOUS CEMENT CO. LTD
.73 BROOK STREET, LONDON W.I. MAYFAIR 8546

Frodgingham Super-Sulphated Cement is manufactured and also sold by:-
FRODINGHAM CEMENT COMPANY
SCUNTHORPE, LINCS. SCUNTHORPE 5337/8

AP 108

MORE THAN 150 MACHINES AVAILABLE

and still

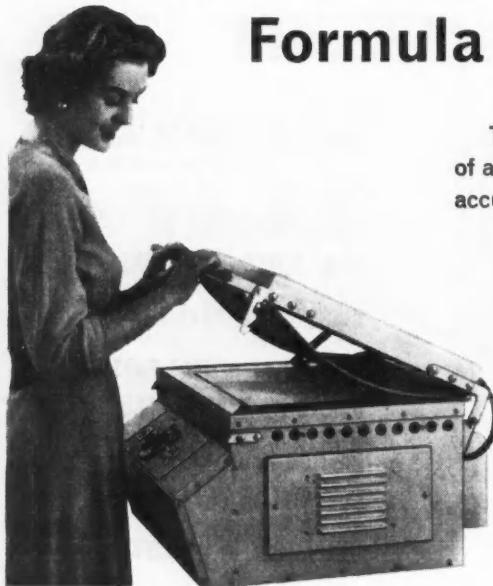
You cannot hire old machines

from

GENERAL ROADWORK

THORNTON HEATH 8252 (PBX)

Formula for copying success



The 'Duostat' Printer Model 14-18 makes photographic copies of all types of documents up to 14" x 18". The copies are photo-accurate—so no checking is required.

The 'Duostat' Auto Processor will process your prints—it provides a ready-for-use copy in 50 seconds. And if you use Kodak 'Autopositive' paper, the whole operation can be carried out under ordinary lighting conditions.

Copies produced by this quick, clean and simple method are permanent—they will not deteriorate. There's a remarkable saving in copying and checking time—which means a saving in money, too.

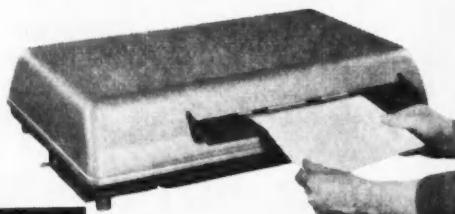
Write now for further details

PHOTOSTAT Limited

Dept. 263, 1-4 Beech Street, London, E.C.1

Tel: METropolitan 0311

'Duostat' and 'Autopositive' are registered trade-marks.



FIRST... IN THE FIELD

first — because
SLATER & ENGLAND LTD.
have been designing
and making
One Cubic-yard
diesel dumper
for longer than
any other
manufacturer!



Shown here is the 15 cwt.
Mk. 4 model.
Struck Capacity, 16 cu. ft.

Also available: The 22½ cwt.,
Mk. 8.
Struck capacity, 27 cu. ft.



The **CONGREVE** range of **DIESEL DUMPERS**

Please Write or Phone the Distributors for Free Demonstration Loan

DISTRIBUTORS: KEBRIC PLANT LTD.

2 to 6 THE MEAD, CARPENDERS PARK, WATFORD, HERTS.

Phone: HATch End 6221/3

**SALES & SERVICE
AGENTS
in most areas!**

Buildmaster Cranes

-Still ahead

**British
built
by**

**RUSTON -
BUCYRUS**

THE CRANE OF ADVANCED DESIGN *

- * The first Tower Crane built with rectangular hollow section tube.



This photograph of one of the first RUSTON BUCYRUS built BUILDMASTER CRANES is reproduced by permission of

GERRARDS

Buildmaster Tower Cranes are being batch produced in the RUSTON-BUCYRUS works at Lincoln for delivery in the spring of 1960

**DEMAND IS ALREADY HEAVY—
ORDER NOW TO MINIMISE DELAY**

ENQUIRIES TO :-

ABELSON

& CO. (ENGINEERS) LTD.

Tel: SHEldon 2424 (10 lines) grams: Abelson, Birmingham

SHELDON · BIRMINGHAM 26

London Office: 60/62 Clapham Rd. Manchester Office: 100 Oxford Rd.
London, S.W.9 Tel. RELiance 7081 Manchester Tel. ARDwick 1328

THE CONTRACT JOURNAL



FOR
GREATER STRENGTH
AND
LONGER LIFE
SPECIFY

NORVIC

PLASTIC COVERED

**CHAIN LINK
FENCING**

* **OUTLASTS GALVANIZED
FENCING**

Norvic Plastic Covering protects from rust and corrosion

* **RETAINS ITS GOOD LOOKS
FOR YEARS**

Norvic Plastic Covering keeps its colour long after other fences have yielded to the atmosphere

* **COSTS LESS IN THE
LONG RUN**

The slight increase in initial cost is more than offset by longer life

SPECIFICATION:

Roll length 25yds.

Mesh 1", 1½", 1½",
1¾", 2"

Gauges 12½, 10½, 10
and 9½ overall with galvanized or bright steel core

Width From 30" up to 13' in 6" stages

Colour Standard Dark Green. Special colours to order

Line Wires Plastic covered



**BARNARDS
LIMITED**

NORWICH Tel: 47321

London: Mansion House 8597
Birmingham: Midland 3555

ALLEN of Oxford have pleasure in announcing

their appointment as

U.K. DISTRIBUTORS

of the

CLEVELAND WHEEL TRENCHER

The Cleveland, renowned for speed of digging, forms an important addition to the world-famous ALLEN Models 12/21, 14/30 and 16/60, and enables us to meet more fully the needs of the industry we serve.

Our technical sales representatives who are backed by our thirty years' experience in this field will be pleased to discuss any trenching problem with you.

Full details, literature and prices of all machines will be sent on request.



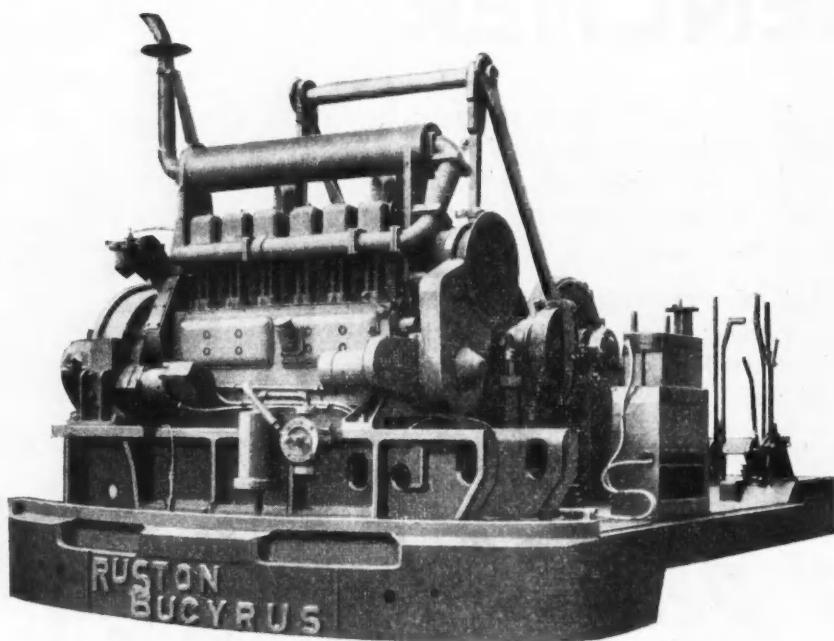
STOP PRESS!
ALLEN NOW
BUILDING CLEVELAND AT OXFORD



JOHN ALLEN & SONS (Oxford) LTD.
COWLEY · OXFORD · Tel: 77155/7

Now you have the choice

*of air-cooled or water-cooled engines on
Ruston-Bucyrus 10-RB, 19-RB and 22-RB excavators*



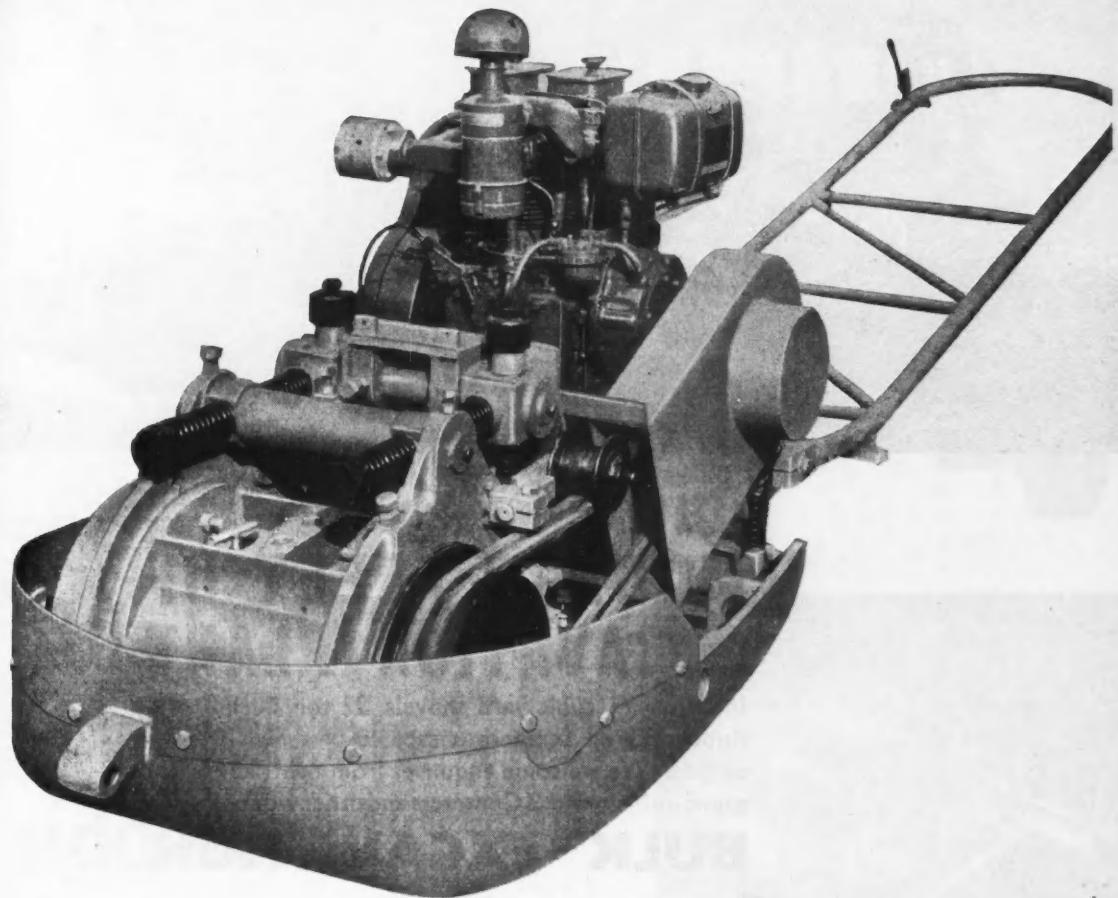
RUSTON-
BUCYRUS

Ruston 'YDA' air-cooled engines are now available for R-B excavators from $\frac{3}{4}$ to $\frac{3}{2}$ cubic yard capacity. Features of 'YDA' engines are their high endurance, easy accessibility and simple maintenance. They are equipped with CAV monobloc fuel pump and CAV injectors. Write for descriptive leaflet RB1605.

RUSTON-BUCYRUS LIMITED, EXCAVATOR SPECIALISTS, LINCOLN

COMPACTORS ENGINEERING LTD.

LOCKFIELD AVENUE, BRIMSDOWN, ENFIELD, MIDDX. TELEPHONE: HOWARD 4063-5



The Vibrosoil Compactor type VS.8 (as illustrated) is a modified version of the well-known 2-ton Compactor. Fitted with a 12 h.p. Diesel or Petrol Engine, it weighs 30cwt. and imparts 1500 ten-ton blows to the material. It can easily cover 700 sq. yds. per hour and compact up to 18" thick layers of soil, hardcore, ashes, gravel, crushed stone, dry concrete, etc., etc., in one or two passes to maximum density. Because of its big amplitude, the Compactor is especially suitable for the vibration of fines into stones. The Compactor is fully automatic and can easily be operated by one man. A transport carriage consisting of pneumatic tyred wheels and a tow bar is supplied with each machine.

Other Compactors available are: the Junior Model weighing 6cwt., the Model VS.6 weighing 15cwt. and the 2-ton Model VSC.2 fitted with a warping capstan.

ALL COMPACTORS ARE ALSO AVAILABLE FOR HIRE

COMPACTORS ENGINEERING LTD.

LOCKFIELD AVENUE, BRIMSDOWN, ENFIELD, MIDDX. TELEPHONE: HOWARD 4063-5

BULK EXCAVATION

problems solved!



Our

MODERN FLEET OF EXCAVATION PLANT

Including 7½ cubic yard shovels, 22 ton Euclids and Rubber Tyred Scrapers is capable of a high weekly output. We welcome enquiries from contractors engaged on Major Road Contracts and other work offering

BULK EXCAVATION

Consult

MARTIN COWLEY LTD
CLAY CROSS • DERBYSHIRE
Telephone • 2291 (5 lines)

London Office:
112 JERMYN ST. LONDON, S.W.1.
Telephone: WHITEHALL 3282 (3 Lines)

*Building and Civil
Engineering Contractors*

TAKE AN OPERATOR'S WORD FOR IT...



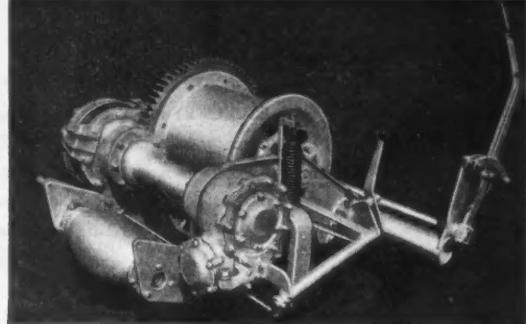
The "Highwayman" Transporter shown here carrying a "19 R.B." excavator, is suitable for payloads up to 25-tons. It is designed as a complete articulated vehicle with correct distribution of the load throughout and balanced air pressure power braking on all wheels, giving maximum stability and safety. Powered by a 750 b.h.p. diesel and fitted with Scammell 6-speed gearbox and heavy duty double reduction epicyclic driving axle.

"This SCAMMELL is worth an additional 3 excavators"

SAY SHORT BROS. OF ABERDARE

"With this low loader we can now move our machines from site to site at our own convenience and it is now a proposition to take on those 2-3 day jobs which previously were impracticable owing to high cost of transport. In fact, the purchase of this Scammell is worth an additional three excavators to us".

Messrs. Short Bros'. Report on their Scammell "Highwayman" Transporter makes pleasant reading . . . but that's not the only praise they give. High performance and manoeuvrability also get top marks. Whilst the largest load carried to date is a 22 R.B., this was found "well within the vehicle's capacity".



The Scammell 10-ton power winch fitted to the motive unit which greatly assists safe loading. Operated from a power take-off on the gearbox and controlled from the driver's seat.

The Scammell range includes tankers, dump trucks, tractors, mobile cranes and semi-trailers for loads ranging from 3 to 150 tons.

Scammells reckon to solve any transport problem . . . that is their speciality. Why not consult them and take advantage of their experience.

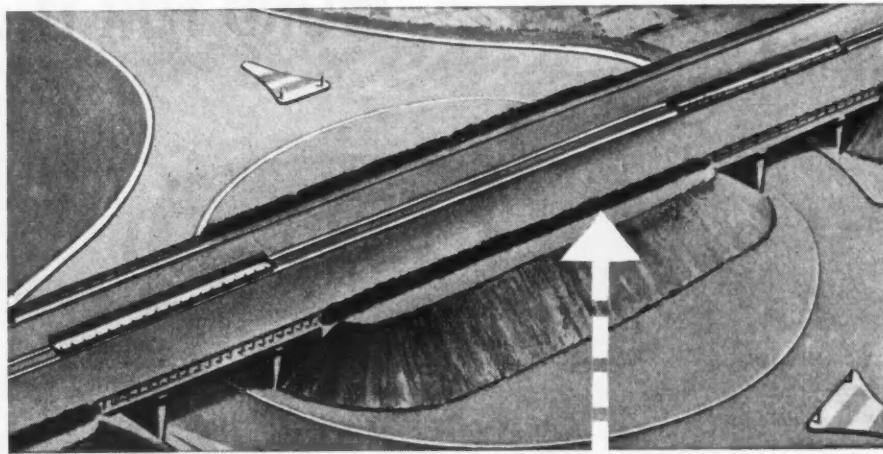
Scammells also produce semi-trailers for loads from 3 to 12 tons fitted with Scammell automatic and S.A.E. Fifth Wheel coupling gear.

SCAMMELL LORRIES LTD
specialists in the unusual

Head Office & Works: Watford, Herts.

Telephone: Watford 25231 & 25691

STRETFORD-ECCLES BY-PASS

TWELVE PRESTRESSED CONCRETE BRIDGES IN LESS THAN SIX MILES

KINGSBURY CONCRETE COMPANY LTD. USED
RYLANDS
 HIGH TENSILE STRESS RELIEVED
WIRES
 IN PRODUCING PRESTRESSED BEAMS
 FOR THESE BRIDGES

The map shows the route of the STRETFORD-ECCLES BY-PASS and the location of the 12 bridges for which prestressed beams were used. 10 of these bridges are constructed to carry the motorway across roads, road junctions and railways. the other 2 are over bridges.

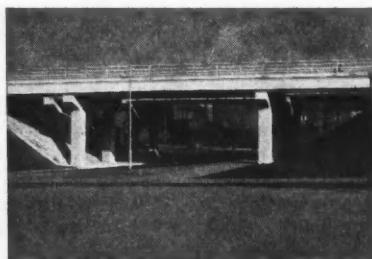
STRETFORD-ECCLES BY-PASS CONSTRUCTED FOR
 LANCASHIRE COUNTY COUNCIL

COUNTY SURVEYOR & BRIDGEMASTER
James Drake, Esq., B.Sc., M.I.C.E., M.I.Mun.E.

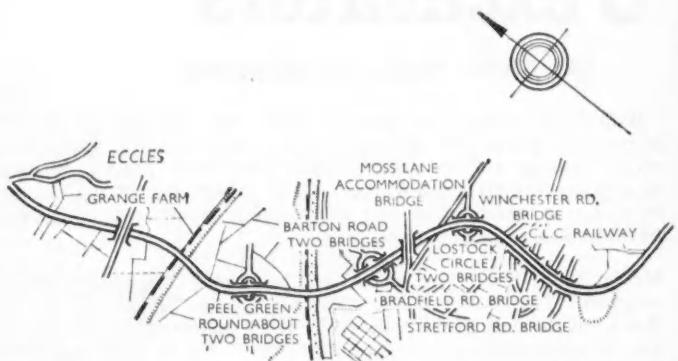
CONTRACTORS: For bridges north of the new Barton Road Bridge
 MESSRS. GEE, WALKER & SLATER, LTD.

For bridges south of the new Barton Road Bridge
 MESSRS. A. E. FARR LTD.

Sub-Contractor for prestressed concrete beams
 MESSRS. KINGSBURY CONCRETE CO. LIMITED



One of the completed bridges at Peel Green



Map showing the twelve bridges

RYLANDS

DEPENDABLE IN THE WORLD OF WIRE

RYLANDS BROTHERS LIMITED, WARRINGTON, ENGLAND

CONTRACTS

BOROUGH OF BARNES.
WESTFIELDS HOUSING SCHEME—PART II
(114 FLATS).

BEVERLEY BROOK SITE—CROSS STREET, S.W.13.

FIXED-PRICE TENDERS are invited for the ERECTION of 114 FLATS in Five Blocks in Crosswall Construction—Five blocks of Four Storeys with Pile Foundations and Ground Floor Beams by other contractor. One Three-storey Block, including Strip Foundations, and Outbuildings.

Forms of Tender, Drawings, Specification and Bills of Quantities may be obtained from the Office of the undersigned, to whom tenders, sealed in the envelope provided, must be returned not later than First Post on WEDNESDAY, 16th March, 1960.

Fully priced Bills, under separate cover if preferred, should be forwarded to this Office on the same day.

W. R. SHEPHERD, A.M.I.C.E., F.R.I.C.S.,

M.I.M.E., A.M.T.P.I.,
Borough Engineer and Surveyor.

Municipal Offices,
Sheen Lane, S.W.14.

CITY OF SALFORD.
PROPOSED 28 (FOUR-STOREY) MAISONNETTES—
OAKLANDS ROAD, SALFORD, 7.

FIXED-PRICE TENDERS are invited for the CONSTRUCTION of 28 MAISONNETTES in Three Four-storey Blocks, at OAKLANDS ROAD, Salford, 7.

Conditions of Contract and Drawings may be inspected at, and Bills of Quantities and Form of Tender obtained from, the City Engineer and Surveyor's Department, Town Hall, Salford, 3, on payment of a deposit of £2 2s. which will be returned on submission of a bona-fide Firm-price Tender, not subsequently withdrawn.

Firm-price Tenders, on the prescribed form, sealed in the envelope provided, and bearing no mark or identification, must be forwarded to the undersigned so as to be received not later than 10 a.m. on WEDNESDAY, 2nd March, 1960.

The Council does not bind itself to accept the lowest or any Firm-price Tender.

R. RIBBLESDALE THORNTON,
Town Clerk.

RURAL DISTRICT COUNCIL OF
DURSLEY.COMPREHENSIVE SCHEME OF WATER SUPPLY—
CONTRACT NO. 4—WITHIN THE PARISHES OF
CAM AND COALEY.

The Council invite TENDERS on a fixed-price basis from experienced civil engineering contractors for the FOLLOWING WORKS OF WATER SUPPLY:

- (1) Construction of a 40,000-gallon Concrete Reservoir.
- (2) Construction of a 5,000-gallon Concrete Break Tank.
- (3) The Provision and Laying of Spun-Iron Water Mains, 2in., 3in., 6in. dia.
- (4) The Provision and Laying of Asbestos-Cement Pressure Mains:—
 - (a) 2.340 in. yd. 6in. dia.
 - (b) 3.780 in. yd. 4in. dia.
 - (c) 3.300 in. yd. 3in. dia.
- (5) The Provision and Laying of Galvanised Steel Mains of 2in. and 1½in. dia., 850 l.m. yd.
- (6) The Provision and Laying of new Service Connections, together with Disconnection of existing Service Connections from existing Mains and new Connections to new Mains, together with all ancillary works.

Contractors desirous of tendering are requested to advise the Council's Consulting Engineers, Messrs. T. WARD WHITFIELD AND SON, 54 Stallard Street, Trowbridge, Wilts., not later than WEDNESDAY, the 17th February, 1960, after which they will receive full particulars. The applications must be accompanied by a deposit of Five Guineas which will be returned after receipt of a bona-fide Tender.

Tenders, in plain sealed envelopes, endorsed "Tender for Water Works," must reach the undersigned by a date to be given by the Engineers.

The Council do not bind themselves to accept the lowest or any Tender.

H. A. PATE,
Clerk of the Council.

Council Offices,
Kingshill,
Dursley, Glos.
2nd February, 1960.

AMERSHAM RURAL DISTRICT COUNCIL.
ENGINEER AND SURVEYOR'S DEPARTMENT.COUNCIL HOUSES—EXTERNAL REDECORATIONS,
1960.

The Council have under consideration a programme of EXTERNAL REDECORATIONS by the COUNCIL HOUSES ON SITE, varying from Eight to 54 Houses in various parts of their area. It is proposed to let Contracts according to the separate Estates involved.

The Council set a high standard for this work, and as a guide to contractors, a priced schedule has been prepared for each site. The work will be closely supervised to ensure that the specifications are adhered to. Selected contractors will be required to submit Tenders based on the priced schedule.

Contractors wishing to be considered for the work should apply (before 29th FEBRUARY, 1960) to the Engineer and Surveyor of the Council, enclosing particulars of similar work recently carried out by them.

The Council will select from the applicants those contractors they consider have the necessary experience and ability to comply with their requirements.

H. E. BUXTON,
Clerk to the Council.

Fimodesham House,
42 High Street,
Amersham, Bucks.

CHESTERTON RURAL DISTRICT
COUNCIL.

IMPINGTON SEWERAGE SCHEME.

The Chesterton Rural District Council invites TENDERS for approx. 1,100 l.m. yd. of 6in. and 9in. CONCRETE PIPES, MANHOLES, PUMPING STATION, and other works.

Drawings and General Conditions of Contract may be inspected at the Office of the Engineer and Surveyor, County Hall, Hobson Street, Cambridge, and from whom the Specification, Bills of Quantities and Form of Tender, may be obtained on payment of a £2 deposit, which will be returned on receipt of a bona-fide Tender, not subsequently withdrawn, plus the return of all documents.

Sealed Tenders, in envelopes bearing no indication of the sender and endorsed "Impington Sewerage Scheme," must be delivered to the undersigned not later than 12 Noon, 7th MARCH, 1960.

The Council does not bind itself to accept the lowest or any Tender.

W. H. HAYWARD,
Clerk of the Council.

CONTRACTS

SURREY COUNTY COUNCIL.
HIGHWAYS AND BRIDGES DEPARTMENT.

TENDERS invited for SUPPLYING and LAYING HOT ROLLED GRANITE ASPHALT CARPET on LONDON-PENZANCE TRUNK ROAD (A.30) at WINDLESHAM (approx. 20,000 sq. yds.).

Particulars and Forms of Tender, returnable by First Post on 29th FEBRUARY, 1960, obtainable from COUNTY ENGINEER, County Hall, Kingston-upon-Thames.

COUNTY BOROUGH OF ROTHERHAM.
CONTRACT FOR THE SUPPLY OF DUSTBINS FOR
THE YEAR 1960-61.

TENDERS are invited for the SUPPLY of 2,500 COMPLETED DUSTBINS, 3½ cu. ft. capacity, weighing complete with lid, 28lb., and complying with B.S. 2916, 1947.

Form of Tender and Conditions of Contract may be obtained from the Borough Engineer, Municipal Offices, Rotherham, on application, and are to be returned to me in a sealed envelope, endorsed "Tender for Dustbins," but bearing no other mark indicating the sender, not later than MONDAY, 29th February, 1960.

The Council does not bind itself to accept the lowest or any Tender.

JOHN S. WALL,
Town Clerk.

Municipal Offices,
Howard Street,
Rotherham.

COUNTY BOROUGH OF HASTINGS.
COLLEGE OF FURTHER EDUCATION—FIRST
INSTALMENT.

Contractors are invited to submit TENDERS for the ERECTION of the ABOVE, comprising Single-storey Workshop Block and Three-storey Main Block (part of which is a two-storey extension) with Cellar, Piling and Site Levelling has already been carried out.

Bills of Quantities and Forms of Tender will be available late February, and may be obtained from the Borough Engineer, 37 Wellington Square, Hastings, on receipt of £5 5s., which will be returned after payment of Tender.

Sealed Tenders, in an envelope, to be provided, should be delivered to the undersigned not later than 10 a.m. on MONDAY, 26th March, 1960.

The Corporation does not bind itself to accept the lowest or any Tender.

N. P. LESTER,
Town Clerk.

Town Hall,
Hastings.

BOROUGH OF RAWTENSTALL.
ANNUAL TENDERS, 1960-61.

TENDERS are invited for the SUPPLY of the UNDERTAKEN MATERIALS for the year ending 31st March, 1961:—

- (1) Fine Cold Asphalt.
- (2) Tarmacadam for Cold Laying.
- (3) Sand and Broken Stone.
- (4) Precast Concrete Kerbs and Flags.
- (5) Salt Glazed Ware Pipes and Fittings.
- (6) Manhole Covers and Frames.
- (7) Gutter Grates and Frames.
- (8) 6in. and 8in. Roadside Chippings.
- (9) White Disinfectant Fluid.
- (10) B.S.S. Galvanised Dustbins.

Contractors desirous of tendering should apply for full particulars to the Borough Engineer and Surveyor, Town Hall, Rawtenstall, and to the Chief Public Health Inspector, Health Office, King Street, Rawtenstall, in respect of Items (9) and (10). Completed Tenders, in plain sealed envelopes, endorsed "Annual Tenders," must be received by the undersigned not later than SATURDAY, 5th March, 1960.

COLIN CAMPBELL,
Town Clerk.

Town Hall,
Rawtenstall,
Rossendale, Lancs.
3rd February, 1960.

BOROUGH OF BERWICK-UPON-TWEED.
ANNUAL CONTRACTS.

TENDERS are invited for the SUPPLY for the year ending 31st March, 1961, as follows:

- (1) Kerbs, Channels and Flags.
- (2) Tarmacadam and Dry Road Metal.

Conditions of Contract, Specifications, Schedules and Forms of Tender may be had on application to the Borough Surveyor at the address below.

The Tenders, enclosed in plain envelopes, sealed and endorsed "Tender for" but bearing no name or mark indicating the senders, must be delivered to the undersigned not later than MONDAY, 14th March, 1960.

The Corporation do not bind themselves to accept the lowest or any Tender, and reserve the right to accept only part of a tender.

R. B. DAVIDSON,
Town Clerk.

Municipal Buildings,
Wallace Green,
Berwick-upon-Tweed.
11th February, 1960.

CITY OF LEEDS.
WATERWORKS DEPARTMENT.

FIXED-PRICE TENDERS are invited for the CONSTRUCTION, COMPLETION and MAINTENANCE of approx. Two Miles of 24in. dia. CAST-IRON MAIN and other works connected therewith, from SPEN GARDENS, WEST PARK, Leeds, to TONGUE LANE, MEANWOOD, LEEDS. The Contract does not include the Supply of Cast-Iron Pipes and Fittings.

Specification and Contract Drawings, together with General Conditions of Contract and Forms of Tender and Agreement, may be obtained from the undersigned, upon payment of a deposit of Three Guineas, which will be refunded following the receipt of a bona-fide Tender and the return of the Contract Drawings.

The whole of the Contract documents, with Bill of Quantities, Schedule of Rates and Prices and Form of Tender, duly completed, must be enclosed in a plain sealed cover addressed to the Town Clerk, endorsed "Tender for 24in. Main," and be delivered to the Town Clerk's Office, Room 57, Civic Hall, Leeds, 1, not later than 12 Noon on FRIDAY, the 4th March 1960.

The Corporation does not bind itself to accept the lowest or any Tender.

KENNETH L. FORSTER, M.I.C.E.,
General Manager and Engineer.

Waterworks Department,
Civic Hall,
Leeds, 1.
3rd February, 1960.

CONTRACTS

MERIONETH COUNTY COUNCIL.
HIGHWAYS AND BRIDGES DEPARTMENT.

TENDERS are invited for the SURFACE DRESSING of TRUNK and COUNTY HIGHWAYS during the year commencing 1st April, 1960.

Tender Forms, Specification and Conditions of Contract may be obtained by sending a stamped addressed envelope to the County Surveyor, County Offices, Peniarth, Dolgellau.

Tenders, enclosed in a plain sealed envelope, endorsed "Tenders—Surface Dressing," should reach the County Clerk, County Offices, Peniarth, Dolgellau, by not later than MONDAY, the 22nd February, 1960.

COUNTY BOROUGH OF GRIMSBY.

EDUCATION COMMITTEE.

SUPPLY OF DETERGENT.

TENDERS are invited for the SUPPLY of approx. 1,000 gallons of DETERGENT annually for use in the School Meals Service and for the Cleaning of Schools. Delivery to Schools and Kitchens will normally be required once each term, and the price should include all charges for delivery and packaging.

Full particulars of the product, e.g., dilution rate, must accompany the Tender, which should be forwarded to the undersigned not later than 14 days following the appearance of this advertisement.

R. E. RICHARDSON,

Education Office,
Eleanor Street,
Grimsbys.

BOROUGH OF RUGBY.
MODERNISATION OF 100 COUNCIL HOUSES AT
CROPS HILL ESTATE.

THE CORPORATION invite TENDERS for the PROVISION of BATHROOMS, INSTALLATION of DOMESTIC HOT WATER SYSTEMS and INCIDENTAL WORKS.

Specification, Drawing and Form of Tender may be obtained from the Borough Surveyor, Burford House, Rugby, on payment of a deposit of £2 2s., which will be refunded on receipt of a bona-fide Tender.

Tenders, in the envelope provided, must be delivered to the undersigned not later than MONDAY, 20th MARCH, 1960.

The Corporation do not undertake to accept the lowest or any Tender.

T. L. DUFFY,
Town Clerk.

BOROUGH OF BARNES.
RECONSTRUCTION OF CASTELNAU, A.306 (PART).
CONTRACT V.

TENDERS are invited for the RECONSTRUCTION of PART of CASTELNAU, A.306, including the Construction of approx. 3,600 sq. yds. of 11in. thick Reinforced Carriageway and Surfacing with 2in. Single Course Hot Rolled Asphalt, and Ancillary Kerbing, Channel and Paving Works.

The Form of Tender, Bill of Quantities and Specification may be obtained from the undersigned, to whom they should be returned, in the envelope provided, not later than MONDAY, 1st MARCH, 1960.

W. R. SHEPHERD, A.M.I.C.E., F.R.I.C.S.,
Borough Engineer and Surveyor.

Municipal Office,
Sheen Lane, S.W.14.
January, 1960.

KESWICK URBAN DISTRICT COUNCIL.

The Council invite builders and contractors who desire to TENDER for the ERECTION of a BUILDING consisting of 20 Aged Persons' Flatties, with Wardens' Accommodation and Communal Rooms, etc., to send their names to the undersigned not later than 27th FEBRUARY, 1960.

The Contract will be a Fixed-price Contract based on a Specification and the Royal Institute of British Architects' Form of Contract for use where quantities do not form part of the Contract.

(Signed) A. E. HENDERSON,
Clerk of the Council.

UTTOXETER URBAN DISTRICT
COUNCIL.

4IN. DIA. WATER MAIN FROM HOCKLEY
CROSSING, STAFFORD ROAD, TO PINFOLD
CROSSING, BALANCE HILL, UTTOXETER.

TENDERS are invited for the PROVISION, JOINT-
ING and LAYING of approx. 500yds. in 4in.
CLASS "C" SPUN IRON WATER MAIN with all
necessary FITTINGS.

Contract documents are obtainable from the Surveyor to the Council, Old Bank House Annex, High Street, Uttoxeter, on deposit of the sum of £3 (Three Pounds), which will be returned upon receipt of a bona-fide Tender, not subsequently withdrawn, and the return of all other documents on request.

Contract documents can be inspected by appointment at the Surveyor's Office.

Sealed Tenders, in a plain envelope, endorsed "4in. Water Main," should be delivered to the undersigned not later than 12 Noon on THURSDAY, 3rd March, 1960.

The Council do not bind themselves to accept the lowest or any Tender.

JOHN H. KENNY,
Clerk of the Council.

Council Office,
Old Bank House,
72 High Street,
Uttoseter, Staffs.
9th February, 1960.

STEVENAGE DEVELOPMENT
CORPORATION.

CIVIL ENGINEERING CONTRACTS.

Applications are invited from civil engineering contractors who wish to be considered for invitations to TENDER for civil engineering works to be commenced in 1960 and to be let in contracts of £50,000 or over.

The works include: (1) ESTATE DEVELOPMENT;

(2) MAIN DRAINAGE; (3) MAIN ROADS.

Contractors should state the types of work in which they are interested and send with their application the names of the firms with whom they have executed work and to whom reference may be made.

Applications, endorsed "Engineering Contractors," should be submitted to reach the CHIEF ENGINEER not later than 5th March, 1960.

Stevenage Development Corporation,
Aston House,
Near Stevenage, Herts.

CONTRACTS

MINISTRY OF TRANSPORT.
LONDON-EDINBURGH-THURSO TRUNK ROAD—
APEX CORNER, HENDON.

The Minister of Transport invites TENDERS for the RECONSTRUCTION of the EXISTING ROUND-ABOUT and Approach Roads at Apex Corner, Hendon, Middlesex; the DUPLICATION of the CARRIAGEWAY from Apex Corner to Courtlands Avenue, and the CONSTRUCTION of FOUR PEDESTRIAN SUBWAYS. Copies of the Contract document may be obtained on payment of £10, from the Consulting Engineers, MESSRS. W. S. ATKINS AND PARTNERS, 158 Victoria Street, London, S.W.1, on payment of a deposit of £15 by cheque made payable to the Minister of Transport. The deposit will not be returned if a bona-fide Tender is submitted and not subsequently withdrawn.

Tenders should be sent in a sealed, registered envelope endorsed "Tender for Apex Corner, Hendon," but not bearing any name or mark indicating the sender, addressed to the Assistant Secretary, Ministry of Transport, 21-37 Hereford Road, London, W.2, to arrive not later than 4 p.m. on WEDNESDAY, 30th March, 1960.

The Minister does not bind himself to accept the lowest or any Tender.

H. GILLENDER,
An Assistant Secretary.

SCOTTISH HOME DEPARTMENT.
ROADS DIVISION.CROFTER COUNTIES SCHEME.
ARGYLL COUNTY COUNCIL.

CONTRACT NO. A.9B.

CAIRNDOW-STRACHUR-TOWARD ROAD,
ROUTE A.815
(STRACHUR-LOCH ECK SECTION). Length 4.13 Miles.

The Council invites TENDERS for the RECONSTRUCTION of the ABOVE SECTION of ROUTE A.815. Drawing and Specification may be seen at the Offices of the Supervising Engineer, Scottish Home Department (Roads Division), Glenshane Road, Oban; and the Chief Road Engineer, Scottish Home Department (Roads Division), Bankhead Avenue, Sighthill, Edinburgh, 12.

Contract documents and further information may be obtained from the Chief Road Engineer at the above address on depositing £15, which deposit will only be returned if a bona-fide Tender is submitted and not subsequently withdrawn. Cheques should be made payable to the Queen's and Lord Treasurer's Remembrancer.

Sealed Tenders, endorsed "Contract No. A.9B. Cairndow-Strachur-Toward Road," must be lodged with The Secretary, Scottish Home Department, Braemore Drive, Saughton, Edinburgh, 11, not later than 4 p.m. on 14th MARCH, 1960.

The Council do not bind themselves to accept the lowest or any Tender.

A. D. JACKSON,
County Clerk.

County Offices,
Lochgilphead, Argyll.
9th February, 1960.

DERBYSHIRE COUNTY COUNCIL.
BRIDGES AND HIGHWAYS DEPARTMENT.

TENDERS FOR MATERIALS.

TENDERS are invited for the SUPPLY of the FOLLOWING during the year ending 31st March, 1961:

(1) Dry Stone and Slag, Wet-mix Hardcore, Coated Macadam, Cold Asphalt, Stone and Gravel Chippings, Concrete Aggregate and Sand; (2) Tar and Bituminous Compounds; (3) Bricks; (4) Cement; (5) Tools and Road Brushes; (6) Concrete Kerbs, Pipes, Flags, Posts, and Ready-mixed Concrete; (7) Protective Clothing; (8) Glazed Stoneware Pipes; (9) Road Traffic Signs; (10) Cast Manhole Covers and Gully Grates and Frames; (11) Hired Plant.

Forms of Tender from the undersigned. State supplies for which forms are required. Sealed Tenders, endorsed "Tender for B. and H." to the Clerk of the County Council, County Offices, Matlock, Derbyshire, by 26th FEBRUARY, 1960.

S. MEHEW,
County Surveyor.

County Offices,
Matlock, Derbyshire.

BOROUGH OF MANSFIELD.

STREET LIGHTING.

TENDERS are invited for the ERECTION, WIRING and PAINTING ONLY of approx. 75 25ft. Mounting Height Columns and approx. 100 15ft. Mounting Height Columns.

Tender documents may be obtained from the Borough Engineer and Surveyor, E. T. CROWE, B.Sc., A.M.I.C.E., Carr Bank, Mansfield, and are to be returned to the undersigned not later than the First Post on TUESDAY, 1st March, 1960.

The Corporation does not bind itself to accept the lowest or any Tender.

A. C. SHEPHERD,
Town Clerk.

BOROUGH OF ACTON.
EDUCATION COMMITTEE.

ANNUAL REPAIRS, 1960/61.

RESURFACING OF SCHOOL PLAYGROUNDS.

TENDERS are invited for the RESURFACING of THREE SCHOOL PLAYGROUNDS in the Borough. Copies of the Specification and details can be obtained from the Borough Engineer, Town Hall, Acton, W.3.

Tenders, endorsed "Resurfacing of School Playgrounds," must be returned by THURSDAY, 24th March, 1960, to BOROUGH EDUCATION OFFICER, Town Hall, Acton, W.3.

CITY OF MANCHESTER.

TENDERS invited for ALTERATIONS to WITHTON LIBRARY.

Bill of Quantities from CITY ARCHITECT, P.O. Box 488, Town Hall.

Tenders returnable by 9th MARCH.

CITY OF MANCHESTER.

TENDERS invited for the SUPPLY and ERECTION of METAL BALUSTRADES at MOSTON COLLEGE FOR FURTHER EDUCATION.

Specification and Drawings from CITY ARCHITECT, P.O. Box 488, Town Hall. Tenders returnable by MARCH 2nd.

CONTRACTS

METROPOLITAN BOROUGH OF
WANDSWORTH.

HOUSING AT CLAPHAM.

Contractors wishing to TENDER for ERECTION of 32 FLATS in TWO 4-STOREY BLOCKS at ST. ALPHONSUS ROAD, Clapham, should submit names to me by 25th FEBRUARY, 1960, giving details of experience, plant, and technical and supervisory staff available, together with names of two referees and two financial referees. Bills of Quantities will be issued to selected contractors in due course.

Drawings may be examined at Office of Borough Engineer and Architect, Municipal Buildings, Wandsworth, S.W.18.

J. NOEL MARTIN,
Town Clerk.

Municipal Buildings,
Wandsworth, S.W.18.

BOROUGH OF SALTASH.

The SALTASH BOROUGH COUNCIL invite TENDERS for the FOLLOWING:

(a) Roadstone and Tarmacadam.
(b) Road Haulage.
(c) Supply of Steam or Diesel Rollers.

(d) Supplying and Spraying of Road Tar.

Contracts will be for 12 months from 1st April, 1960. Quarry owners should state the number of quarries from which they wish to offer materials, as a separate form is required for each quarry.

Conditions of Contract and Tender Form obtainable from the Borough Engineer, Church House, Saltash, returnable by THURSDAY, 25th February, 1960.

A. GORDON BELLINGHAM,
Town Clerk.

Church House,
Saltash.

9th February, 1960.

CITY OF BIRMINGHAM.

SALVAGE COMMITTEE.

TENDERS are invited for the SUPPLY and DELIVERY of 8,000 2½ cu. ft. TAPER DUSTBINS and LIDS, to British Standard Specification 792 : 1947.

Full details of the requirements of the Corporation may be obtained from the General Manager, Salvage Department, Civic Centre, Broad Street, Birmingham, 1. Closing date for Tenders: Noon, MONDAY, 29th February, 1960.

T. H. PARKINSON,
Acting Town Clerk.

Council House, 1.

CITY OF BIRMINGHAM.

TO PUBLIC WORKS CONTRACTORS.

The HOUSEBUILDING COMMITTEE invite TENDERS on a Fixed-prices Basis for the MESSUAGES and the Contract for the CONSTRUCTION of ROADS and the CONSTRUCTION of FOUL and SURFACE WATER SEWERS, together with incidental work, on KINGSHURST HALL HOUSING ESTATE (PART 4).

Conditions of Roads and Works Specification, Bills of Quantities and Form of Tender may be obtained on payment of £2 2s. at the Office of SIR HERBERT J. MANZONI, City Engineer and Surveyor, Civic Centre, Birmingham, 1, to whom all cheques should be made payable. The deposit will be returned on receipt of a bona-fide Tender.

Plans for Roads and Sewerage Works can be seen at Rooms 339 and M.39, respectively, Civic Centre, Birmingham, 1.

Tenders, enclosed in the envelopes provided for the purpose, must be sealed and delivered to the Town Clerk's Office (Room No. B.31), Council House, Birmingham, 1, not later than 12 Noon on WEDNESDAY, 2nd March, 1960, when they will be opened. Tenders received after that time will be rejected.

The Committee do not bind themselves to accept the lowest or any Tender.

T. H. PARKINSON,
Acting Town Clerk.

Council House, 1.

SUNBURY - ON - THAMES URBAN DISTRICT COUNCIL.

IMPROVEMENT OF GASTON BRIDGE ROAD (A.244) AT THE MUSHROOM FARM.

TENDERS are invited for the REALIGNMENT and RECONSTRUCTION of the CARRIAGEWAY and FOOTPATHS in the ABOVE STREET with two-course Hot Asphalt and Gravel Asphalt Carrigeway, Concrete Kerbs and Channels, Bitumen Gravel Macadam Footpaths, Grass Verges, Concrete Surface Water Drainage, and ancillary works.

Drawings may be inspected at the Office of the Engineer and Surveyor, from whom Tender documents may be obtained.

Tenders must be returned to the undersigned, in plain, sealed envelopes, not later than Noon on MONDAY, 7th March, 1960.

T. WATTS,
Clerk of the Council.

Council Offices,
Sunbury-on-Thames.

18th February, 1960.

ROSS AND WHITCHURCH RURAL DISTRICT COUNCIL.

WORKS OF WATER SUPPLY.

COMPREHENSIVE SCHEME—STAGE 2—CONTRACT 8.

TENDERS are invited for the CONSTRUCTION of approx. 12 Miles of SPUN-IRON WATER MAINS of 8in., 4in., and 3in. dia., together with the CONSTRUCTION of TWO REINFORCED CONCRETE RESERVOIRS of 250,000 and 40,000 gallons capacity, the CONSTRUCTION of TWO PUMPING STATIONS and incidental works, in accordance with the Drawings, Specification and Bills of Quantities prepared by the Engineers, MESSRS. A. H. S. WATERS AND PARTNERS, of 25 Temple Row, Birmingham, 2.

The Drawings may be seen at, and the General Conditions of Contract, Specification, Bills of Quantities and Form of Tender may be obtained from the Offices of the Engineers, MESSRS. A. H. S. WATERS AND PARTNERS, of 25 Temple Row, Birmingham, 2, on payment of a deposit of Five Guineas, which will be refunded upon receipt of a bona-fide Tender and the return of all documents.

Sealed Tenders, on the form supplied and in the endorsed envelope provided, are to be delivered to me at my Office not later than Noon on MONDAY, 14th March, 1960.

The Council does not undertake to accept the lowest or any Tender.

H. B. REYNOLDS,
Clerk of the Council.

Woodside,
Ross-on-Wye,
Herefordshire,

February, 1960.

CONTRACTS

BOROUGH OF LOWESTOFT.
TRANSPORT DEPARTMENT.

TENDER FOR THE SUPPLY OF GOODS, 1960-61.

TENDERS are invited for the SUPPLY of ALL or ANY of the FOLLOWING GOODS to the Transport Department of the Lowestoft Corporation during the period April 1st, 1960, to the 31st March, 1961:

Fuel Oil.
Lubricating Oils.
Greases.
Paraffin.
Brake Linings.
Coke.

Further particulars, Specifications, Forms of Tender and Conditions of Contract may be obtained on application to the Transport Administration Office, Transport Department, Rotterdam Road, Lowestoft. Such Tenders are asked to indicate, if possible, when so applying, the particular goods for which they wish to have the opportunity of tendering.

Tenders, upon the form provided, must be addressed to the undersigned and must be received at the Town Hall, Lowestoft, not later than 12 Noon on SATURDAY, the 12th March, 1960. No Tender will be received unless in a sealed envelope, endorsed "Tender for Goods—Transport." The envelope should not bear any indication of the identity of the sender. The Corporation do not bind themselves to accept the lowest or any Tender.

F. B. NUNNEY,
Town Clerk.

Town Hall,
Lowestoft,
Suffolk.

February, 1960.

CITY AND COUNTY OF THE CITY OF LINCOLN.

TENDERS are invited for the SUPPLY of the FOLLOWING MATERIALS for the 12 months ending 31st March, 1961:

- (1) Tarred Slag.
- (2) Lime and Sand.
- (3) Emulsion for Spraying Road Surfaces (Cold only).
- (4) Concrete Kerb, Channel and Flaps.
- (5) Salt Glazed Stoneware Pipes and Gully Pots.
- (6) Brushes (Scavenger Brushes and Refills for Collectors).
- (7) Cement.
- (8) Bituminous Slag.
- (9) Disinfectant Powder and Toilet Paper.
- (10) Dustbins.

Forms of Tender may be obtained on application to the City Engineer and Surveyor, Silver Street, Lincoln.

Sealed Tenders, suitably endorsed, must be delivered to the undersigned, in plain sealed envelopes bearing no name or mark indicating the sender, not later than 5 p.m. on FRIDAY, 26th February, 1960.

J. HARPER SMITH,
Town Clerk.

Town Clerk's Office,
Lincoln.

5th February, 1960.

CITY OF LEEDS.

HIGHWAYS DEPARTMENT.

The HIGHWAYS COMMITTEE of the LEEDS CITY COUNCIL invite TENDERS for:

KERBINGE, TARMACADAM, and in-situ CONCRETE FOOTPATH, TARMACADAM and CONCRETE CARRIAGEWAYS, etc., in the FOLLOWING PRIVATE STREETS:

North Terrace,
Primrose Park View (Part),
Queens Avenue,
Staithes Close.

Forms of Tender and Bills of Quantities may be obtained upon payment of a deposit of One Guinea, which amount will be returned upon receipt of a bona-fide Tender. Plans, Specifications and copies of the documents forming the contract may be inspected upon application to the Highways Engineer, 155 Kirkstall Road, Leeds, 4.

Tenders will be considered only when submitted sealed in the envelope provided, endorsed "Highways Department—Tender for Contractors' Works," and not bearing any name or mark indicating the sender. Tenders must be delivered at the Town Clerk's Office (Committee Department), Room 57, Civic Hall, Leeds, 1, not later than 10 a.m. on THURSDAY, the 3rd March, 1960.

The lowest or any Tender will not necessarily be accepted.

W. J. HISCOCK,
Highways Engineer.

February, 1960.

CANNOCK URBAN DISTRICT COUNCIL.

TENDERS FOR ANNUAL SUPPLIES.

TENDERS are invited for the SUPPLY and DELIVERY of the FOLLOWING MATERIALS for the period ending March 31st, 1961:

- (1) Cold Asphalt.
- (2) Bituminous Macadam.
- (3) Tarmacadam.
- (4) Refined Tar-Bitumen Compound.
- (5) Gravel.
- (6) Building and Concrete Sand.
- (7) Hydraulically Pressed Concrete Kerbs and Channel Blocks.
- (8) Road Salt.
- (9) Tools for Tarspraying.
- (10) Tools and Ironmongery.
- (11) Premixed Waterbound Macadam.
- (12) Stores and Drysaltaries.
- (13) Protective Clothing.
- (14) Castings.
- (15) Cement.
- (16) Bricks.
- (17) Concrete Pipes and Gullies.
- (18) Stoneware Pipes and Gullies.

Forms of Tender and particulars may be obtained on application to the Engineer and Surveyor, Council House, The Green, Cannock.

TENDERS are also invited for the SUPPLY and DELIVERY of PETROL, OILS and GREASES, forms for which can be obtained from the Cleansing and Transport Superintendent, Council Offices, Church Street, Cannock.

All applications must be accompanied by stamped addressed four-foolscap envelopes.

Tenders, enclosed in plain sealed envelope, bearing no name or mark to indicate the sender, addressed to the undersigned, together with the necessary samples, are to be received not later than 12 Noon on MONDAY, 14th March, 1960.

The Council do not bind themselves to accept the lowest or any Tender.

H. C. ALLEN,
Clerk of the Council.

Council House,

The Green,

Cannock, Staffs.

8th February, 1960.

CONTRACTS

COUNTY BOROUGH OF NORTHAMPTON.
ROAD AND SEWER WORKS.

TENDERS are invited for the CONSTRUCTION of approx. 3,450 sq. yd. of CONCRETE CARRIAGeway and approx. 480 lin. yd. FOUL and SURFACE WATER SEWERS, together with Kerbs, Manholes, Gullies, and incidental works, to form a new road off Thornton Road.

Form of Tender, etc., may be obtained from the Borough Engineer, Guildhall, Northampton, on payment of £2 2s. returnable on receipt of a bona-fide Tender, not subsequently withdrawn, and must reach me by 10 a.m. on FRIDAY, 11th March, 1960.

C. E. VIVIAN ROWE,
Town Clerk.

BOROUGH OF DORCHESTER.
WATERWORKS DEPARTMENT.

The COUNCIL invite TENDERS from experienced contractors for the LAYING of approx. 2,000 lin. yd. of 9in. dia. WATER MAIN. Copies of the Specification, Bills of Quantities and Form of Tender may be obtained from the Borough Engineer, Municipal Offices, North Street, Dorchester, on payment of Two Guineas, which will be refunded on receipt of a bona-fide Tender and the return of all documents.

Tenders, in plain sealed envelopes, endorsed "Water Main," must reach the undersigned not later than Noon on SATURDAY, 12th March, 1960. The Council do not bind themselves to accept the lowest or any Tender.

F. P. LAKE SYDENHAM,
Town Clerk.

Municipal Offices,
Dorchester.BOROUGH OF TWICKENHAM.
PRIVATE STREET WORKS.

TENDERS are invited for the MAKING-UP of the FOLLOWING ADJOINING PRIVATE STREETS:

Coombe Crescent, Coombe Road and South Road (Sections 1 and 2), Hampton.

The works comprise approx. 350 lin. yd. of 9in. Sewer, 3,300 sq. yd. of Carrigeway Foundation (Hartpury), 900 lin. yd. of Kerbings and Channelling, 1,500 sq. yd. of Pavement and other incidental works. Plans may be obtained and Specification, Bills of Quantities and Form of Tender may be obtained on application to the Borough Engineer, Municipal Offices, Twickenham, and on the payment of Two Guineas deposit, which will be returned on receipt of a bona-fide Tender.

Tenders in the envelope provided, endorsed "Private Street Works," and not bearing any mark indicating the sender, must be delivered to the undersigned not later than 10 a.m. on MONDAY, 7th March, 1960.

The Corporation do not bind themselves to accept the lowest or any Tender.

W. H. JONES,
Town Clerk.

Municipal Offices,
Twickenham.
3rd February, 1960.

STROUD URBAN DISTRICT COUNCIL.

CHAIN LINK FENCING—LONDON ROAD DEPOT.

TENDERS are invited for the PROVISION and ERECTION of approx. 375 lin. yd. of CHAIN LINK FENCING.

Specification and Bill of Quantities may be obtained from the Engineer and Surveyor.

Tenders, on the form provided, and enclosed in a plain envelope, endorsed "Tender for Chain Link Fencing," must be returned not later than the First Post on TUESDAY, 1st March, 1960, to the undersigned.

The Council do not bind themselves to accept the lowest or any Tender.

H. S. GIBBONS,
Clerk of the Council.

Council Chambers,
High Street,
Stroud, Glos.UPTON - UPON - SEVERN RURAL
DISTRICT COUNCIL.
CASTLEMORTON SEWERAGE AND
SEWAGE DISPOSAL.

FIRM-PRICE TENDERS are invited for the EXECUTION of the FOLLOWING WORKS:

The Laying of approx. 1,037 yd. of 6in. dia. and 10in. dia. Grit, of 4in. dia. Stonewall Pipe, the Construction of 14 ft. x 10 ft. Concrete Manholes, and the Construction of a Sewage Disposal Works comprising Grit Chamber, Upward Flow Sedimentation Tank and Collection Chamber, Filter Bed, Humus Tank, Sludge Beds and other appurtenant works. Form of Tender, etc., may be obtained from the Surveyor, Council Offices, Upton-upon-Severn, Worcester, on payment of £5 5s., which will be returned on receipt of a bona-fide Tender, not subsequently withdrawn, and the return of contract documents.

Tenders in the envelopes provided, together with contract documents, to be delivered to the undersigned not later than Noon on SATURDAY, 19th March, 1960.

The Council do not bind itself to accept the lowest or any Tender received.

E. A. TURNER,
Clerk of the Council.

Council Offices,
Upton-upon-Severn,
Worcester.
10th February, 1960.

NANTWICH RURAL DISTRICT COUNCIL.

PILE AND BEAM FOUNDATIONS—WISTASTON
BUNGALOWS.

TENDERS are invited from contractors experienced in similar works for CARRYING OUT PILE and BEAM FOUNDATION WORK to EIGHT BUNGALOWS at Wistaston.

The work comprises 60 Piles—depth 10ft. to 15ft.—together with the necessary Reinforced Caps and Beams to Foundations.

Specification, Bill of Quantities and Form of Tender may be obtained from the Engineer and Surveyor, at the address below, on payment of a deposit of One Guinea, which will be returned on receipt of a bona-fide Tender and return of all documents.

Tenders must be delivered to the undersigned, in plain sealed envelopes endorsed "Tender—Piled Foundations," not later than First Post on SATURDAY, 26th March, 1960.

F. E. DAVENPORT,
Clerk of the Council.

Council Offices,
Stapeley House,
Near Nantwich.
11th February, 1960.

THE CONTRACT JOURNAL

CONTRACTS
COUNTY BOROUGH OF BURNLEY.
PRIVATE STREET IMPROVEMENT WORKS—
THREE STREETS.

TENDERS are invited from public works contractors for the MAKING-UP in PITCHING and BITUMEN MACADAM, in the FOLLOWING STREETS:

- (1) Firs Grove Road—length 66 lin. yd.
- (2) Athletic Street—length 131 lin. yd.
- (3) Irene Street—length 41 lin. yd.

Copies of the Standard Conditions of Contract, Specification of Quantities and Form of Tender may be obtained from the Borough Engineer and Surveyor, 22/24 Nicholas Street, Burnley, on payment of a deposit of One Guinea, which will be returned on receipt of a bona-fide Tender or the return of all documents supplied.

General Conditions of Contract and Drawings may be inspected at the above office during normal office hours.

Tenders must be returned to the undersigned not later than 9 a.m. on FRIDAY, the 4th March, 1960.

The Council does not bind itself to accept the lowest or any Tender.

C. V. THORNLEY,
Town Clerk.

BOROUGH OF HARROGATE.
PRIVATE STREET IMPROVEMENT WORKS.

TENDERS are invited for the MAKING-UP of one or more of the FOLLOWING PRIVATE STREETS:

- (a) Firs Avenue, 130 lin. yd.
- (b) Firs Grove, 180 lin. yd.
- (c) Firs Gate, 130 lin. yd.
- (d) Firs Close, 55 lin. yd.

The work comprises Kerbings and Flagging to the Footpath, and Surfacing of the Carrigeway in Tarmac and Fine Cold Asphalt.

Plans and conditions of Contract may be inspected at the Office of the Borough Engineer, Municipal Offices, Harrogate, from whom Specification, Bills of Quantities and Forms of Tender may be obtained.

Sealed and endorsed Tenders, on the official form, together with the priced Bills of Quantities, are to be delivered in the envelope provided to the Borough Engineer not later than 10 a.m. on FRIDAY, 26th February, 1960.

The lowest or any Tender will not necessarily be accepted.

C. E. FELLOWS,
Borough Engineer.

Municipal Offices,
Harrogate.
11th February, 1960.BOROUGH OF HYTHE.
IMPROVEMENTS TO ROYAL MILITARY CANAL
OUTFALL.

Contractors wishing to TENDER for the ABOVE Scheme, and requested to submit their names to the Borough Surveyor, at the address below, not later than First Post, FRIDAY, 26th February, 1960, and deposit the sum of £5 5s., the refund of which will be conditional upon the submission of a bona-fide Tender, accompanied by all the documents issued. Cheques should be made payable to Hythe Corporation.

It is anticipated that copies of the Form of Tender and Bill of Quantities will be dispatched on, or about, the 26th February, 1960, and a date will then be specified by which the Tenders must be returned to the undersigned.

The Corporation does not bind itself to accept the lowest or any Tender.

J. NOWELL,
Town Clerk.

Municipal Offices,
Hythe, Kent.
11th February, 1960.BOROUGH OF ILKESTON.
REPAINTING OF CORPORATION HOUSES.

TENDERS are invited for the REPAINTING of the FOLLOWING:

- 193 Houses on the Kirk Hallam Estate.
- 256 Houses on the Green Lane Estate.
- 103 Houses on the Cotmanhay Estate.

Specifications, Conditions of Contract and Forms of Tender may be obtained from the Borough Surveyor, Town Hall, Ilkeston.

Tenders, in plain sealed envelopes, endorsed "Painting Tender," but not bearing any name or mark indicating the sender, must be received by me not later than 12 Noon on MONDAY, 7th March, 1960.

The Borough Council does not bind itself to accept the lowest or any Tender.

J. YATES,
Town Clerk.

Town Hall,
Ilkeston.
12th February, 1960.CITY OF LIVERPOOL.
WATER DEPARTMENT.

TRYWERYN DAM AND ANCILLARY WORKS.

TENDERS invited for the CONSTRUCTION, in the TRYWERYN VALLEY, MERIONETHSHIRE, North Wales, for EARTH DAM some 150ft. high and containing some 3 million cu. yd. of materials, together with ancillary structures and associated works.

Documents from Messrs. Binnie, Deacon and Gourley, Artillery House, Artillery Row, Westminster, S.W.1, between 1st March and 1st April, 1960. Deposit £5, payable City Treasurer, Liverpool.

Tenders returnable by Noon, 16th MAY, 1960.

(J.6045.)

THOMAS ALKER,
Town Clerk.

Bourn Pumping Station.

CHESTERTON AND ST. IVES JOINT
WATER BOARD.

BOURN PUMPING STATION.

FIXED-PRICE LUMP-SUM TENDERS are invited from experienced contractors for the SINKING of a BOREHOLE through the Bottom of an existing Well, together with ancillary works.

The Specification, Drawings, and Form of Tender may be obtained from the Engineer to the Board, County Hall, Hobson Street, Cambridge, on payment of a deposit of £2 2s., which will be refunded on receipt of a bona-fide Tender not subsequently withdrawn.

The General Conditions of Contract may be inspected at the Engineer's Office during normal office hours.

Tenders, in plain sealed envelopes endorsed "Bourn Pumping Station," must be received by the undersigned not later than Noon on TUESDAY, 15th March, 1960.

The Board do not bind themselves to accept the lowest or any Tender.

W. H. HAYWARD,
Clerk of the Board.

County Hall,
Hobson Street,
Cambridge.

CONTRACTS

HERTFORDSHIRE COUNTY COUNCIL.
DIVERSION OF HUNTERS LANE, LEAVESDEN.

TENDERS are invited for the ABOVE CONTRACT, The works, which consist of the Construction of $\frac{3}{4}$ mile of New Carrigeway, comprise Site Clearance, 6,000 cu. yd. Excavation, 1,000 lin. yd. Footway Edging, 3,000 lin. yd. Kerbings, 1,500 tons Asphalt, 2,500 cu. yd. Lean-mix Concrete, and 600 lin. yd. of Concrete Post and Chain Link Fencing.

Tender documents may be obtained from the County Surveyor, County Hall, Hertford, on or after 22nd FEBRUARY, 1960, and Drawings may be inspected by appointment.

Tenders are to be returned to the CLERK OF THE COUNTY COUNCIL not later than 10 a.m. on WEDNESDAY, 9th March, 1960.

The County Council are not bound to accept the lowest or any Tender.

County Hall,
Hertford.

BOROUGH OF COLWYN BAY.
ROAD SURFACE DRESSING CONTRACT.

TENDERS are invited for the FOLLOWING PRIVATE STREETS: to be carried out during the year ending 31st March, 1961:

For the Supply of all Materials and for Tar-painting and Spreading of Chippings on Roads within the Borough, approx. 100,000 sq. yd.

Tender documents may be obtained from MR. H. WILMAN, A.M.I.C.E., Borough Engineer and Surveyor, Walley Range, Lansdowne Road, Colwyn Bay.

Tenders, in plain sealed envelopes endorsed "Surface Dressing Contract," must be delivered to the undersigned not later than 12 Noon on MONDAY, 29th February, 1960.

HAROLD E. BRAITHWAITE,
Town Clerk.

Town Hall,
Colwyn Bay.

9th February, 1960.

BOROUGH OF EDMONTON.

TENDERS are invited for the CONSTRUCTION of NINE-STOREY BLOCK, comprising 40 Maisonsnettes and Five Dwellings for Aged Persons, together with 18 Garages in Three Blocks, within the Borough.

A copy of the Drawings, Conditions of Tender, and Conditions of Contract, may be inspected at the Office of the Borough Architect, Architects, Applications for Form of Tender and Bills of Quantities, accompanied by a deposit of Two Guineas (which will be refunded only on receipt of a bona-fide Tender and other Contract documents), must be made to the Borough Architect, Town Hall, Edmonton, not later than First Post on MONDAY, 29th February, 1960.

Tenders, sealed in the endorsed envelope provided, must be delivered to the undersigned not later than 12 Noon on MONDAY, 21st March, 1960.

The Council do not bind themselves to accept the lowest or any Tender.

H. BACKHOUSE,
Town Clerk.

BOROUGH OF GILLINGHAM.

SURFACING IN HOT ROLLED ASPHALT.

TENDERS are invited for REGULATING and SURFACING the CARRIGEWAYS of the UNDERMENTIONED ROADS in HOT ROLLED ASPHALT:

- (1) Grange Road (Part)—approx. 5,000 sq. yd.
- (2) Bensons Road (Part)—approx. 4,500 sq. yd.
- (3) Church Street—approx. 2,500 sq. yd.

Contractors wishing to submit Tenders should apply for the necessary documents to the Borough Engineer, Municipal Buildings, Gillingham, Kent, enclosing a sum of £2 2s., made payable to the Gillingham Corporation, which will be returned on receipt of a bona-fide Tender not subsequently withdrawn.

Tender—Asphalt Surfacing," must be received by the undersigned not later than Noon on TUESDAY, the 1st March, 1960.

The Council do not bind themselves to accept the lowest or any Tender.

FRANK HILL,
Town Clerk.

Municipal Buildings,
Gillingham, Kent.

9th February, 1960.

HITCHIN URBAN DISTRICT COUNCIL.

PROVISION AND ERECTION OF PRECAST
CONCRETE GARAGES, ETC.

The Council invite TENDERS for the SUPPLY and ERECTION of 73 GARAGES on four separate Housing Sites, together with about 1,600 sq. yd. of Concrete Aprons, 2,700 sq. yd. of Surfaced Hoggins Forecourts, Sockaway Drainage, and appurtenant works.

Specification and Form of Tender may be obtained from the Surveyor's Office, Council Offices, Brand Street, Hitchin, on payment of a deposit of £2 2s. (returnable on receipt of a bona-fide Tender not subsequently withdrawn).

Tenders must be delivered to me, in a plain sealed envelope, endorsed "Estate Garages," not later than 11th MARCH, 1960.

The Council do not bind themselves to accept the lowest or any Tender.

W. WILSON,
Clerk of the Council.

Council Offices,
Brand Street,
Hitchin, Herts.

11th February, 1960.

WATFORD RURAL DISTRICT COUNCIL.

OXHEY PAVILION.

TENDERS are invited for the CARRYING OUT of EXTENSIVE ALTERATIONS and ADDITIONS to the OXHEY PAVILION in GREEN LANE, Oxhey, including Changing, Accommodation, Refreshment Room, Lavatories, Dressing Work, etc., in accordance with Plans which may be inspected at the Council Offices.

Contractors should apply by the 5th MARCH, 1960, for the supply of copies of the Bills of Quantities and Form of Tender, which will be issued on receipt of a deposit of £2 2s. (returnable on receipt of a bona-fide Tender not subsequently withdrawn).

Directions for the submission of Tenders will be issued to applicants contractors, with copies of the Tender documents.

The Council do not bind themselves to accept the lowest or any Tender, and security will be required for the due performance of the Contract.

S. A. NICHOLSON,
Clerk to the Council.

Council Offices,
Wynyard House,
99 Langley Road,
Watford, Herts.

CONTRACTS

EAST RIDING OF YORKSHIRE COUNTY COUNCIL.

LIVERPOOL-LEEDS-HULL TRUNK ROAD, A.63.
IMPROVEMENT WEST OF GILBERDYKE RAILWAY BRIDGE.

TENDERS are invited for the ABOVE IMPROVEMENT a length of approx. 600yd. The works include the Provision and Consolidation of Filling, Draining, Kerbing, and Carriageway Construction.

Forms and Conditions of Tender, Conditions of Contract, Specification and Bill of Quantities may be obtained from the County Surveyor, County Hall, Beverley, on payment of a deposit of Two Pounds, which will be returned to any unsuccessful bona-fide tenderer who returns all documents supplied and whose Tender is not withdrawn. The deposit will be returned to the successful tenderer on completion of the Contract documents. Cheques, etc., to be made payable to the East Riding County Council.

Drawings and other relevant details may be examined at the Trunk Roads Office of the County Surveyor, Westminster Bank Chambers, London, Beverley, at any time during customary office hours.

Tenders, in plain sealed envelope, which will be provided by the Council, endorsed "Tender for Road Improvement—West of Gilberdyke Bridge," and bearing no mark indicating the sender, are to be delivered to the undersigned not later than 4 p.m. on MONDAY, 14th March, 1960.

THOMAS STEPHENSON,
Clerk of the County Council.

County Hall,
Beverley, Yorks.
11th February, 1960.

BOROUGH OF BURY ST. EDMUNDS.

GRAVEL ASPHALT BASE COURSE AND WEARING COURSE.

TENDERS are invited for the SUPPLY of approx. 1,000 tons of BASE COURSE GRAVEL ASPHALT and for the SUPPLY and LAYING by MECHANICAL SPREADER of approx. 8,000 sq. yd. WEARING COURSE GRAVEL ASPHALT.

Copies of the Specification and Form of Tender may be obtained, free of charge, from the Borough Engineer and Surveyor, to whom Tenders must be returned not later than 12 Noon on WEDNESDAY, 9th March, 1960.

The Council do not bind themselves to accept the lowest or any Tender.

G. S. STANLEY,
Borough Engineer and Surveyor.

Borough Offices,
Bury St. Edmunds.

CITY OF BIRMINGHAM.

TO BUILDING CONTRACTORS.

CONTRACT 706—27 ONE- AND TWO-STORY DWELLINGS—ARDENCOTE ROAD, KING'S HEATH.

The HOUSEBUILDING COMMITTEE invite FIRM-PRICE TENDERS for the ERECTION of the ABOVE. Bills of Quantities and Form of Tender will be forwarded on payment of £2 2s. at the Office of A. G. SHEPPARD FIDLER, City Architect, Civic Centre, Birmingham, 1, to whom all cheques should be made payable. Specification should be made by 25th FEBRUARY 1960.

Conditions of Contract (which include the usual Fair Wages and Conditions of Labour Clause) may be seen at the City Architect's Office during normal working hours.

The deposit will be returned on receipt of a bona-fide Tender, or on notification of receipt of a bona-fide Tender, together with the return of the documents not later than three days before the date for receipt of Tenders.

Tenders, enclosed in the envelope provided for the purpose, must be sealed and delivered to the Town Clerk's Office (Room No. B.31), Council House, Birmingham, 1, not later than 12 Noon on FRIDAY, the 25th March, 1960. Tenders received after that time will be rejected.

The Committee do not bind themselves to accept the lowest or any Tender.

T. H. PARKINSON,
Acting Town Clerk.

Council House,
Birmingham, 1.

ALDERLEY EDGE URBAN DISTRICT COUNCIL.

LONDON ROAD, A.34—ALDERLEY EDGE IMPROVEMENT FROM JUNCTION WITH HEYES LANE TO JUNCTION WITH STEVENS STREET.

TENDERS, on a Fixed-price Basis, are invited for the ABOVE ROAD IMPROVEMENT WORK, consisting of Excavation and Foundations to Additional Width of Carriageway; Precast Concrete Kerbing (approx. 400 lin. yd.); Reshaping Carriageway with Bituminous Macadam and Surfacing with Cold Asphalt Area (approx. 2,500 sq. yd.); Reshaping and Surfacing Footways, with a total area of approx. 1,500 sq. yd.), together with Drainage and ancillary works.

The Drawings may be inspected, and copies of the Conditions of Contract, Specification, Bill of Quantities and Form of Tender may be obtained, on payment of a deposit of £2 2s. (returnable on receipt of a bona-fide Tender), from the Surveyor, Council Offices, Alderley Edge.

Tenders, in plain sealed envelopes endorsed "London Road Improvement," are to be received by the undersigned not later than Noon on FRIDAY, the 18th March, 1960.

B. ANSON,
Clerk of the Council.

Council Offices,
Alderley Edge.

UCKFIELD RURAL DISTRICT COUNCIL.

MAIN DRAINAGE—HARTFIELD.

FIXED-PRICE TENDERS are invited for the CONSTRUCTION of approx. 7,380yd. of 6in. dia. STONEWARE SEWERS and Manholes, together with the Adaptation of existing Tanks as Sedimentation and Storm Water Tanks, the Construction of a Percolating Filter, Humus Tanks, and Sludge Drying Beds.

Tender documents may be obtained from the Surveyor at the Council Offices upon payment of a deposit of Two Guineas, which will be returned upon receipt of a bona-fide Tender, and subsequently withdrawn, and all the documents issued.

Tenders, in the envelopes provided, endorsed "Main Drainage—Hartfield," must be received by the undersigned not later than Noon on THURSDAY, the 17th March, 1960.

The Council are not bound to accept the lowest or any Tender.

D. C. DURRANT,
Clerk of the Council.

Council Offices,
Beacon Road,
Crowborough,
Sussex.

CONTRACTS

BOROUGH OF CHARD.

TOUCHSTONE LANE IMPROVEMENT SCHEME.

TENDERS are invited for the FOLLOWING WORKS. (Approx.:

250 lin. yd. Hedge Removal.
1,000 cu. yd. Excavating Over Area.
1,100 cu. yd. Prepare and Shape Carriageway.
1,100 super. yd. Clinker 3in. thickness.
1,100 super. yd. Granular Base 12in. thickness.
1,000 super. yd. Scarifying Surface.
2,100 super. yd. 6in.-coast macadam.
2,100 super. yd. Hot Bitumen Dressing.
600 super. yd. 18in. Stone Walls, together with Concrete Foundations.
850 super. yd. Single Course Tarmacadam to Footpaths.
400 lin. yd. 6in. Surface Water Sewers.
12 Gullies.
4 Manholes.

and other incidental works.

Specifications and Bills of Quantities may be obtained from the Borough Surveyor, Municipal Offices, High Street, Chard, upon payment of £1 10s., which will be returned on receipt of a bona-fide Tender not subsequently withdrawn.

Tenders, in plain sealed envelope endorsed "Tender—Touchstone Lane Improvement," must be delivered to the undersigned not later than Noon on MONDAY, 14th March, 1960.

The Council do not bind themselves to accept the lowest or any Tender.

F. W. SEARLE,
Town Clerk.

Municipal Offices,
High Street,
Chard, Som.
8th February, 1960.

BOROUGH OF SWINDON.

TRADITIONAL BUILDING PROGRAMME.

MY COUNCIL propose to undertake a large Traditional Housebuilding Programme during the next two years and would welcome inquiries from firms prepared to build about 400 DWELLINGS during this period on large sites within the town. There is a strong possibility of further continuing.

Firms having the necessary resources, especially so far as manpower is concerned (it may be necessary to import large numbers of building labour) are requested to get in touch with me.

D. MURRAY JOHN,
Town Clerk.

Civic Offices,
Swindon, Wilts.
11th February, 1960.

ESHER URBAN DISTRICT COUNCIL.

EXTERNAL PAINTING OF 38 COUNCIL HOUSES.

CONTRACT NO. 297.

TENDERS are invited from painting contractors for the EXTERNAL REPAINTING of 20 HOUSES, SIX BUNGALOWS and 12 FLATS at GRANGE ROAD and BRENDEN GARDENS, West Molesey.

The Form of Tender, Conditions of Contract and Specification may be obtained from the Engineer and Surveyor, Council Offices, Esher, on payment of a deposit of One Guinea, which will be refunded on receipt of all documents in good condition.

Tenders, in plain sealed envelope, enclosed in the envelope provided, endorsed "Contract No. 297—External Repainting," and bearing no name or mark indicating the sender, must be returned to the undersigned and received by him not later than 5 p.m. on TUESDAY, 15th March, 1960.

The Council do not bind themselves to accept the lowest or any Tender.

FREDERICK EDWARDS,
Clerk of the Council.

Council Offices,
Esher, Surrey.
25th January, 1960.

SHERBORNE RURAL DISTRICT COUNCIL.

SEWERAGE SCHEMES.

The Sherborne Rural District Council invites TENDERS from experienced civil engineering contractors for the CONSTRUCTION of the FOLLOWING THREE SEWERAGE SCHEMES:

(i) Sewerage of Alweston, comprising Laying 840 lin. yd. of 6in. dia. Concrete Pipe Sewers and Extension of the Sewage Disposal Works.
(ii) Sewerage of Thorneford, comprising Laying 1,200 lin. yd. of 6in. dia. Concrete Pipe Sewers and Construction of a Sewage Disposal Works.
(iii) Sewerage of Bradford Abbas, comprising Laying 1,370 lin. yd. of 6in. dia. Concrete Pipe Sewers and Extension of Sewage Disposal Works, and Construction of a Sewage Pumping Station and Rising Main.

Specifications, Bills of Quantities and Forms of Tender may be obtained from the Council's Consulting Engineers, MESSRS. T. ALLEN AND SIEBER, Hall Street, Sherborne. Deposit on payment of a deposit of Three Guineas in respect of each Contract, which sums will be refunded on receipt of the respective bona-fide Tenders and Tender documents.

Contractors may tender for any one or for all three Schemes and the Council will award the contracts individually to suitable firms as they may decide. The lowest or any Tender will not necessarily be accepted, and acceptance will be subject to that part of the Council's Standing Orders relating to Contracts, and to the approval of the Ministry of Housing and Local Government.

Tender documents are to be enclosed in a plain sealed envelope endorsed "Sewerage Schemes," and must be received by the undersigned not later than TUESDAY, the 15th March, 1960.

IVOR SARTIN,
Clerk of the Council.

Council Offices,
Greenhill,
Sherborne, Dorset.

STEVENAGE DEVELOPMENT CORPORATION.

ROAD 3.

TENDERS are invited for a new DUAL CARRIAGE-WAY ROAD LINK, some 2,000ft. long, between TERMINAL ROUNDABOUTS, together with Five Underpass Bridges and Prestressed Concrete Bridges over the main railway lines and the Great North Road (A.1).

The contract will involve the pretensioning on site of 70-ton beam units, 200ft. long.

Applications for tender documents, giving details of comparable work undertaken, and references, should be made to the Corporation's Consulting Engineers, Messrs. RENDEL, PALMER AND TRITTON, 125 Victoria Street, Westminster, London, S.W.1.

Tenders are returnable on the 28th MARCH, 1960.

CONTRACTS

BEDFORDSHIRE COUNTY COUNCIL.

SUPPLIES TO RESIDENTIAL ESTABLISHMENTS.

TENDERS are invited for the SUPPLY of GROCERIES, PROVISIONS, TEA, BISCUITS, MILK, MEAT, BREAD and FISH to the FOLLOWING: St. Cuthbert's Home, Streatley, near Luton, Caddington Hall, near Luton, The Mount, Luton, Rookwood, Luton, Pirton Hall, Shillington, The Cedars, Luton, The Linen, Biggleswade, Waverley House, Bedford, Russell House, Bedford.

Forms and details may be obtained from the County Welfare Officer, 61 High Street, Bedford.

Tenders, in sealed endorsed envelopes, to be returned to the CLERK OF THE COUNTY COUNCIL, Shire Hall, Bedford, by 4th MARCH, 1960.

COUNTY BOROUGH OF BURY.

TENDERS invited for SUPPLY and DELIVERY of J.C.B. 302 LOADING SHOVEL.

Form of Tender from Borough Engineer, Town Hall, Bury.

Tenders, enclosed in plain sealed envelope endorsed "Loading Shovel," must reach me by 22nd FEBRUARY, 1960.

EDWARD S. SMITH,
Town Clerk.

Town Hall,
Bury.

4th February, 1960.

CORPORATION OF BARKING.

DEPARTMENT OF THE BOROUGH ARCHITECT.

THAMES VIEW HALL.

TENDERS are invited for the ERECTION of a PUBLIC HALL, size approx. 72ft. x 33ft., plus Foyer, Cloaks, Dressing, etc., in Single-storey Construction with a Light Concrete Frame with Brick Walls.

Firms desiring to TENDER should apply for an Application Form to be obtained from the Borough Architect, Town Hall, Barking, and be returned to the undersigned.

The closing date for applications is 10 a.m., FRIDAY, the 26th February, 1960.

E. R. FARR,
Town Clerk.

Town Hall,
Barking, Essex.

CITY OF BIRMINGHAM.

TO HEATING CONTRACTORS.

The WELFARE COMMITTEE invite TENDERS, on a Fixed-price Basis, for INSTALLATION of PHASES 1 and 1A of the CENTRAL BOILERHOUSE SCHEME at the WORKSHOPS FOR THE BLIND, WOODVILLE ROAD, HARBORNE.

General Conditions (which include the Corporation's usual Fair Work and Conditions of Labour Clause) may be inspected at the Mechanical and Public Lighting Department, 38 Cambridge Street, Birmingham, 1. Copies of the Specification and Plans, etc., can be obtained on payment of £2 2s. at the Office of SIR HERBERT J. MANZONI, City Engineer and Surveyor, Council House, Birmingham, 1, to whom all cheques should be made payable. The deposit will be returned on receipt of a bona-fide Tender.

Tenders, enclosed in the envelope provided for the purpose, must be sealed and delivered to the Town Clerk's Office (Room No. 151), Council House, Birmingham, 1, not later than 10 a.m. on TUESDAY, 8th March, 1960, when they will be opened. Tenders received after that time will be rejected.

The Committee do not bind themselves to accept the lowest or any Tender.

T. H. PARKINSON,
Acting Town Clerk.

Council House,
Birmingham, 1.

THE URBAN DISTRICT COUNCIL OF ABERDARE.

ACCOMMODATION WORKS AT LLWYDCOED.

TENDERS are invited for CARRYING OUT ALTERATIONS to OUTBUILDINGS and other Accommodation Works at NANTGOCH, Llywodcoed, Aberdare, for the purpose of Improvement.

Copies of Plans and Specifications may be obtained from the Office of the Engineer and Surveyor, Vestry Hall, Green Street, Aberdare, on the payment of a deposit of £2 2s., which will be returned on receipt of a bona-fide Tender.

"Tender—Nantgoch," and bearing no other mark indicating the sender, must be received by the undersigned not later than 19th MARCH, 1960.

The Council does not bind itself to accept the lowest or any Tender.

D. G. JAMES,
Clerk of the Council.

Town Hall,
Aberdare.

12th February, 1960.

BASFORD RURAL DISTRICT COUNCIL.

COSSALL DRAINAGE.

TENDERS are invited for CARRYING OUT SEWERAGE WORK, including the FOLLOWING: Erection of Automatic Electric Sewage Pumping Station with underground Sump and Pump Room.

Conversion of Existing Tanks into Storm Water Tanks.

Supplying and Laying of 4in. Spun-Iron Pumping Main, involving River and Canal Crossings.

Supplying and Laying of 6in. and 8in. Iron and Concrete Pipe Sewers, with Manholes, etc., involving crossing under Main Railway tracks.

Plans can be seen, and copies of the General Conditions, Specification and Bill of Quantities may be obtained from MR. ERIC KIRK, A.I.A.S., A.R.S.H., M.Inst.R.A., Joint Engineer and Surveyor, Rock House, Stockhill Lane, Basford, Nottingham, on deposit of £5 5s. (by cheque), which will be returned on receipt of a bona-fide Tender (not afterwards withdrawn) and the return to the Engineer of all documents loaned to the contractor for the purpose of making up his Tender.

Sealed and endorsed Tenders to be delivered to the undersigned not later than Noon on TUESDAY, 8th March, 1960.

The lowest or any Tender not necessarily accepted.

By Order.

EDMUND ANDERTON,
Clerk to the Council.

Public Offices,

Stockhill Lane,

Basford, Nottingham,

15th February, 1960.

CONTRACTS

DEVON COUNTY COUNCIL.

TENDERS are invited for PAINTING THREE BRIDGES.
Particulars and Tender Forms, returnable by 14th MARCH, from COUNTY SURVEYOR, Coaver, Topsham Road, Exeter.

EAST SUFFOLK COUNTY COUNCIL.

TENDERS are invited for the SUPPLY of FURNITURE for CAMP ST. MARY, NEW PRIMARY SCHOOL, EXTENSIONS to EYKE and STOKE ASH PRIMARY SCHOOLS, and new HOUSECRAFT ROOM at FRAMLINGHAM MILLS GRAMMAR SCHOOL.

Schedules, Specifications and Tender Forms obtainable from the Chief Education Officer, Education Office, Rope Walk, Ipswich, IP1 1JL.

Completed Tenders to be received by the CLERK OF THE COUNCIL, County Hall, Ipswich, not later than First Post on 7TH MARCH, 1960.

The Council do not bind themselves to accept the lowest or any Tender.

COUNTY BOROUGH OF BOLTON.

TENDERS invited for SUPPLY of UNIFORM CLOTHING to Children's, Welfare and Health Departments.

Form of Tender, to be returned by Noon, 4th MARCH, obtainable from MEDICAL OFFICER OF HEALTH, Civic Centre, Bolton.

METROPOLITAN BOROUGH OF CAMBERWELL.

TENDERS are invited for SUPPLYING the FOLLOWING:

- (a) Six House Refuse Collection Vehicles (Seddon chassis with Eagle Compressor body);
- (b) One 6-ton Long-wheelbase Drosprise Truck; (c) One 2½-ton Low-load Tipping Truck; (d) One 800-gallon Combined Gully Emptier and Street Washing Machine;
- (e) One Ferguson 35 Tractor and 30cwt. Tipping Trailer 704; (f) One Road-burning Machine, 4ft. x 2ft. hood; (g) One Vibrating Treadie Compactor; (h) One 100-gallon Discharge Pump; (i) Four Rapier Rotary Mowers; (j) Three Sectional Rotary Mowers; (k) Two 30in. Ransomes Cutting Units for Triple Gang Mower, complete with Drawbar Attachment.

Tender Forms on application to the BOROUGH ENGINEER AND SURVEYOR, Town Hall, S.E.5. Closing date: WEDNESDAY, 2nd March, 1960.

BOROUGH OF HESTON AND ISLEWORTH.

STREET LIGHTING IMPROVEMENT.

WELLINGTON ROAD NORTH AND WELLINGTON ROAD SOUTH, HOUNSLAW (B.358).

TENDERS are invited for the INSTALLATION of STREET LIGHTING in Group "A" Standard in Wellington Road North and Wellington Road South, Hounslow (B.358), from BATH ROAD, Hounslow, to HANWORTH ROAD, Hounslow.

The work includes the Removal of 35 Existing Columns and the Supply and Erection of 44 Steel Columns, 100m. of Pre-tensioned Fibreglass (colour corrected) Lamps, Lanterns, and Control Gear.

One deposit of £2 2s. (returnable if a bona-fide Tender is received and not withdrawn), the Bill of Quantities, Specification and Form of Tender may be obtained from, and the Conditions of Contract and Drawings seen at the Borough Engineer's Department, 88, Lampton Road, Hounslow.

Tenders, in endorsed envelopes supplied by the Corporation, but not indicating the tenderer, must be delivered to me by 10 a.m. on FRIDAY, 11th March, 1960.

The Corporation are not bound to accept any Tender.

D. MATHIESON,
Town Clerk.

Town Hall,
Hounslow, Middx.

BOROUGH OF KING'S LYNN.

HARDWICK ROAD TRADING ESTATE—FIRST SECTION.

TENDERS on a Fixed-price Basis, are invited for the CONSTRUCTION of approx. 6,615 sq. yd. of CARRIAGEWAYS, LAYING 1,140 lin. yd. of SEWERS and 719 lin. yd. of WATER MAINS, together with ancillary works, at Hardwick Road Trading Estate, King's Lynn.

Copies of the Specification, Bills of Quantities and Form of tender may be obtained from, and General Conditions of Contract and Drawings inspected at, the Office of the Borough Engineer, Clifton House, 17 Queen Street, King's Lynn, upon payment of a deposit of £2 2s., which will be returned on receipt of a bona-fide Tender.

Tenders, in the envelope provided, must be returned to the undersigned not later than Noon on TUESDAY, 8th March, 1960.

The Corporation do not bind themselves to accept the lowest or any Tender.

E. W. GOCHER,
Town Clerk.

Town Hall,
King's Lynn.

BOROUGH OF CHATHAM.

RECONSTRUCTION OF NEW ROAD AVENUE (A.2)—STAGE 1.

TENDERS are invited for the FIRST STAGE of RECONSTRUCTION WORKS in New Road Avenue, Chatham, comprising approx. 300 lin. yd. of Kerbing, together with the Repair and Reconstruction of approx. 1,500 super. yd. of Carrigeway Foundation and Concrete.

Tender documents may be obtained on payment of a deposit of Two Guineas from MR. J. A. T. RICHARDS, F.I.A.S., M.I.M.E., Borough Engineer and Surveyor, Town Hall, Chatham.

Tenders should be returned in a plain sealed envelope, endorsed "Tender for Reconstruction of New Road Avenue," to reach the Town Clerk, Town Hall, Chatham, not later than Noon, MONDAY, 29th February, 1960.

The Corporation does not bind itself to accept the lowest or any Tender.

ROWLAND NEWNES,
Town Clerk.

Town Hall,
Chatham.

12th February, 1960.

BEDFORDSHIRE EDUCATION COMMITTEE.

TENDERS are invited for the SUPPLY and DELIVERY of GARDEN TOOLS and MATERIALS to EDUCATIONAL ESTABLISHMENTS in the County of Bedford (excluding the Boroughs of Bedford and Luton).

Forms of Tender from the DIRECTOR OF EDUCATION Shire Hall, Bedford, by 27th FEBRUARY, 1960.

CONTRACTS

WILTSHIRE COUNTY COUNCIL.

TENDERS are invited for the FOLLOWING:—

- (a) Installation of Heating and Cold Water Systems.
- (b) Installation of Electrical System.

At Devizes Southbrook Controlled New Primary School (approx. 15,650 sq. ft.).

Applications to tender with details of available labour force, organisation and particulars of any similar work carried out, to be made by MARCH 4th, 1960, to the County Architect.

The Council reserves to itself the right to select the tenders who will be invited to tender.

Plans and Specifications will be sent to selected contractors.

P. A. SELBORNE STRINGER,
Clerk of the County Council.

County Hall,
Trowbridge.

DERBYSHIRE COUNTY COUNCIL

BRIDGES AND HIGHWAYS DEPARTMENT.

TENDERS are invited for one 8/10-TON DIESEL ROAD ROLLER, preferably with Scissor Water Sprinkler and Enclosed Cab. Delivery to Ambergate, near Derby.

Tenders, with full Specification and approx. delivery period, in plain sealed envelope endorsed "Tender for Roller, 8/10-Ton H.D. to Clerk of the County Council, County Offices, Matlock, Derbyshire, not later than WEDNESDAY, 24th February, 1960. Tender Forms will not be issued.

S. MEHEW,
County Surveyor.

County Offices,
Matlock.

COUNTY BOROUGH OF BARNESLEY.

LUNDWOOD SEWAGE DISPOSAL WORKS RECONSTRUCTION.

CONTRACT Q.

TENDERS are invited from experienced civil engineering contractors for the CONSTRUCTION of a 65ft. dia. REINFORCED CONCRETE HUMUS TANK and a 30ft. dia. PUMPING STATION, together with ancillary works.

Documents may be obtained from the Borough Engineer, Town Hall, Barnsley.

Tenders, in the envelopes provided, should reach the undersigned not later than 12 o'clock Noon, FRIDAY, 18th March, 1960.

The Corporation do not bind themselves to accept the lowest or any Tender.

A. E. GILFILLAN,
Town Clerk.

Town Hall,
Barnsley.

February, 1960.

BOROUGH OF NEWBURY.

TURNPIKE ROAD HOUSING SITE—PART 1—ROADS AND SEWERS.

TENDERS are invited for the CONSTRUCTION of approx. 2,650 lin. yd. of 8in. REINFORCED CONCRETE CARRIAGEWAY, together with Foul and Surface Water Sewers.

Specification, Bill of Quantities and Form of Tender may be obtained from the Borough Surveyor, Municipal Buildings, Newbury, at whose Office Plans and General Conditions of Contract may be inspected.

Sealed Tenders endorsed "Turnpike Road Housing Site—Part 1" should be delivered to the undersigned not later than THURSDAY, 31st March, 1960.

The Corporation does not bind itself to accept the lowest or any Tender.

LESLIE SOUTHERN,
Town Clerk.

BOROUGH OF ELLESMERE PORT.

CONTRACT NO. 292.

80 GROUP "B" ELECTRIC STREET LAMPS IN VARIOUS PARTS OF THE BOROUGH AS IN-FILLING BETWEEN EXISTING LAMPS.

TENDERS are invited for the PROVISION and ERECTION OF 80 CONCRETE GROUP "B" ELECTRIC STREET LAMPS complete in various parts of the Borough, as in-filling between existing lamps.

Contract documents obtainable from the Borough Engineer and Surveyor, Queen Street, Ellesmere Port, on the 20th FEBRUARY, 1960.

Sealed Tenders, in the plain official envelope provided, must reach the undersigned by Post by not later than 5 p.m. on MONDAY, the 14th March, 1960.

The Council do not bind themselves to accept the lowest or any Tender.

R. J. BERNIE,
Town Clerk.

Municipal Offices,

Ellesmere Port, Cheshire.

10th February, 1960.

URBAN DISTRICT COUNCIL OF COSELEY.

TENDERS.

TENDERS are invited for the SUPPLY of the UNDERMENTIONED MATERIALS during the year ending 31st March, 1961, viz.:—

- (a) Road Materials and Road Signs.
- (b) Tools, Plant and Protective Clothing.
- (c) Building Materials.
- (d) Cast-Iron and Rainwater Goods, Dustbins and Tubular Linoposts.
- (e) Paint and Decorating Materials.
- (f) Plumbing Materials.
- (g) Ironmongery and Hardware.
- (h) Electrical and Gas.
- (i) Motor Oils and Tyres.
- (j) Printing and Stationery.

Tender Forms forwarded on receipt of a stamped addressed envelope, stating items required.

Closing date for Tenders, First Post on FRIDAY, 4th March, 1960. Tenders should be sent in plain sealed envelopes marked "Tender" (not state item).

The Council do not bind themselves to accept the lowest or any Tender.

JOSEPH C. ROPER,
Clerk of the Council.

Council House,

Coseley.

19th February, 1960.

CHESHIRE EDUCATION COMMITTEE.

CHESHIRE COUNTY TRAINING COLLEGE, CREWE.

TENDERS are invited for the SUPPLY of HOSTEL FURNITURE to the above Training College.

Forms of Tender, returnable by 11th March, 1960, obtainable by sending stamped addressed envelope to JOHN G. KELLETT, Director of Education, Education Department, County Hall, Chester.

CONTRACTS

COUNTY BOROUGH OF SOUTHAMPTON.

TENDERS invited for ERECTION of KITCHEN/ DINING ROOM at WOOLSTON SECONDARY SCHOOL, Southampton.

Forms and Particulars, including Bill of Quantities, from Borough Architect, on written application by 27th FEBRUARY, 1960. R.B.A. Contract plus Supplementary Conditions available for inspection.

Tender to TOWN CLERK, Civic Centre, Southampton, by 10 a.m., 21st MARCH, 1960.

METROPOLITAN BOROUGH OF LEWISHAM.

TENDERS are invited for the SUPPLY of the FOLLOWING:—

- (a) Two Seddon/Eagle Compressmore Refuse Vehicles.
- (b) One Seddon Refuse Vehicle (fore and aft tipping), equipped for emptying 1½ cu. yd. containers.

In each case, offers are invited for taking used vehicles in part exchange.

Particulars and Form of Tender from the BOROUGH ENGINEER, Lewisham Town Hall, Catford, S.E.6. Closing date, 12 Noon, 27th FEBRUARY, 1960.

BOROUGH OF HORNSEY.

REDSTON ROAD PLAYING FIELD CHANGING PAVILION.

TENDERS are invited for the ERECTION of a CHANGING PAVILION at the Redston Road Playing Field, N.E.8.

Tenders to be submitted by Noon on MONDAY, the 11th March, 1960.

Applications to tender to the Borough Engineer and Surveyor, Town Hall, Hornsey, N.E.8, not later than 1st MARCH, 1960.

W. B. MURGATROYD,
Town Clerk.

CITY OF BATH.

LANSDOWN LANE IMPROVEMENT.

TENDERS are invited for the RECONSTRUCTION and WIDENING of approx. 170 lin. yd. of LANSDOWN LANE, Bath. The following works are included:

Laying of 180 lin. yd. 27in. and 24in. Precast Concrete Paving.

Erection of Concrete Retaining Wall 8ft. high, approx. 180ft. in length.

Construction of 1,265 sq. yd. of Carrigeway.

Construction of One High-level and One Low-level Footpath, combined area 770 sq. yd.

Plans may be obtained at the address given at the General Conditions of Contract. Specification, Bill of Quantities and Form of Tender may be obtained from the Office of the City and Waterworks Engineer, Guildhall, Bath, on payment of a deposit of Two Guineas, which will be returned on receipt of a bona-fide Tender, not subsequently withdrawn.

Tenders must be delivered in the envelope provided, not later than 10 a.m. on THURSDAY, 16th March, 1960, to the Town Clerk, Guildhall, Bath.

The Corporation do not bind themselves to accept the lowest or any Tender.

JARED E. DIXON,
Town Clerk.

Guildhall,

Bath.

5th February, 1960.

BRAINTREE RURAL DISTRICT COUNCIL.

Applications are invited from persons, firms and companies who wish to be included on the Council's list of SELECTED TENDERERS for the SUPPLY of ALL or ANY of the SERVICES, GOODS or ARTICLES required by contract within the following trade categories:—

1. Building Contractors.

2. Public Works Contractors.

3. Electrical Contractors.

4. Building Materials (excluding those in List 5), Paint, etc.

5. (a) Baths and Sanitary Ware.

(b) Electrical Fittings (including Cookers, Copper, etc.).

7. Motor Vehicles.

8. Motor Vehicles Fittings and Components.

9. Water Mains and Fittings.

10. Protective Clothing.

Forms of application (returnable by 2nd MARCH, 1960) can be obtained from the CLERK OF THE BRAINTREE RURAL DISTRICT COUNCIL, St. Peter's Close, Bocking, Braintree, Essex.

Firms already on the Council's lists need not apply, as they will be supplied with application forms automatically.

GREAT OUSE RIVER BOARD.

TENDERS FOR IMPROVEMENT WORKS, 1960-61.

TENDERS are invited for the FOLLOWING IMPROVEMENT WORKS to be carried out during the financial year 1960-61:—

(1) Gauging Weir and Bridges, Willen, near Newport Pagnell, Buckinghamshire.—Works include 2,160 cu. yd. Excavation, 4,000 cu. yd. Fill, 6,250 cu. ft. Reinforced Concrete and 980 cu. yd. Roadworks.

(2) Dredging of River Ouse, near Newport Pagnell, Buckinghamshire.—Works include 11,260 cu. yd. Excavation, 8,900 cu. yd. Fill, 17,800 cu. yd. Soil Treatment.

Copies of the contract documents and Drawings for one or both of these works may be obtained from the Engineer of the Board, at the address given below, on payment of a deposit of £100 per act (where applicable) to be made payable to the Great Ouse River Board, which will be refunded on the receipt of a bona-fide Tender, not subsequently withdrawn, and on the return of all documents and Drawings.

Separate Tenders, enclosed in the endorsed addressed envelopes provided, must be received by no later than 9 a.m. on MONDAY, 7th March, 1960.

K. M. RODDIS,
Clerk of the Board.

"Elmhurst,"

Brooklands Avenue,

Cambridge.

11th February, 1960.

MERIONETH EDUCATION COMMITTEE.

TO CONTRACTORS.

TENDERS are invited for FORMING & PLAYING FIELD and ASPHALT SURFACING at the PRIMARY SCHOOL, Barmouth.

Copies of the contract documents and Drawings may be obtained on application to the County Architect, County Offices, Lombard Street, Dolgellau, on payment of £2 2s., returnable on receipt of a bona-fide Tender.

Tenders, in plain sealed envelopes endorsed "Barmouth Primary School—Playing Field," must reach the DIRECTOR OF EDUCATION not later than MONDAY, 7th March, 1960.

CONTRACTS

COUNTY BOROUGH OF HALIFAX.
PLANT.

TENDERS are invited for the SUPPLY and DELIVERY of the FOLLOWING:—
One 15cwt. capacity 4-wheel Diesel Dumper.
One 4-wheel Hand-operated Cold Emulsion
One 3cwt. Hand Roller.
One 5cwt. Hand Roller.

Suppliers are asked to note that Forms of Tender and Specifications are not issued. Tenders, accompanied by detailed Specifications of the plant offered, to the TOWN CLERK, Town Hall, Halifax, not later than 1st MARCH, 1960. Envelopes to be endorsed 'Plant'.

ISLINGTON BOROUGH COUNCIL.

TENDERS are invited for the SUPPLY and DELIVERY of approx. 376 lin. yd. of 4ft. 6in. high IRON RAILING FENCING with Four SINGLE and Two DOUBLE GATES, and Two ORNAMENTAL IRON GATES. Forms of Tender, available from the BOROUGH ENGINEER AND SURVEYOR, Town Hall, Upper Street, N.1, are returnable not later than Noon on TUESDAY, 1st March, 1960.

BOROUGH OF SLOUGH.
MUNICIPAL DUSTBIN SCHEME.

The COUNCIL proposes to inaugurate a scheme for supply of replacement dustbins to householders in the Borough.

TENDERS are, therefore, invited for the SUPPLY and DELIVERY of supplies of 2½ and 3½ ft. B.S.S. Taper Type DUSTBINS. Further particulars and Form of Tender obtainable from Borough Engineer, Town Hall, Slough, Bucks.

Tenders should be returned, in envelope provided, to TOWN CLERK, Town Hall, Slough, Bucks, by Noon, 7th MARCH, 1960. The Council does not bind itself to accept the lowest or any Tender.

CITY OF COVENTRY.
SUPPLY AND APPLICATION OF TAR.

TENDERS invited for SUPPLY and MECHANICAL APPLICATION OF TAR to ROAD SURFACES during the period ending 31st March, 1960. Forms and Specification from the CITY ENGINEER, Council House, Coventry. Completed Tender returnable by 29th FEBRUARY.

CITY OF COVENTRY.
CAPITAL ROAD RESURFACING PROGRAMME, 1960.

TENDERS invited for RESURFACING ROADS with total area approx. 12,500 sq. yds., and incidental works. Documents from CITY ENGINEER, Council House, Coventry, on payment of £5 deposit, returnable on receipt of bona-fide Tender by 4th MARCH.

WOODLANDS (WORCESTERSHIRE), LTD.
Tenders invited for the FOLLOWING GOODS:—

Compressor House, Water, Hoses, Water Filters, Compressors, Harland Pumps, Collis Stacker, Boot Finishing Machine, Pinch Bars, Marine Gearboxes, Pipe Threading Tools, Underwater Cutting Plant, Interference Suppressors, Electric Motors, Generating Plant, Onan Engines, Sheaf Blocks, Rope Clamps, Grinding Wheels, White Batteries, Water Main Taps, Drills, Blanketed Radio Test Drills, Plastic Coating, Paint, Cable, Scales, Diving Suits, Breathing Apparatus, Metal Work Benches, Spare Parts for Earthmoving Equipment, Chain Blocks and Travellers, Photographic Equipment.

Tenders should be available on application.
Inspection of goods from 7th to 19th March, 1960.
Tenders opened 26th MARCH, 1960.

WOODLANDS (WORCESTERSHIRE), LTD.
Four Pools Farm, Evesham, Worcestershire.

CARR'S QUIPS.—ESTIMATES. Even a strong man needs a stick sometimes. The most reliable crutch in the business.—R. J. CARR, Britain's Top Free-lance Estimator, 42 Coombe Road, New Malden, Surrey. Tel.: Malden 8640.

TENDERS invited from suitable builders for extensive private HOUSING SCHEME, Bolton area.—For details, write Box X.1257, 'The Contract Journal'.

BRICKLAYER SUB-CONTRACTORS REQUIRED for new SINGLE-STOREY FACTORY to be built in HUDDERSFIELD. Commence mid-March. Letters stating experience and indication of prices required, to Box X.1265, 'The Contract Journal'.

KEBING SUB-CONTRACTORS (Labour only) REQUIRED for small road contracts—London and Home Counties. Reply Box X.1266. "The Contract Journal."

For Contracts received too late for classification see page 845

APPOINTMENTS VACANT

FEDERAL GOVERNMENT OF NIGERIA.
EXECUTIVE ENGINEERS.

EXECUTIVE ENGINEERS REQUIRED by the Federal Government of Nigeria to carry out preliminary surveys and investigations for all types of civil engineering undertakings, to prepare engineering designs in steel and reinforced concrete and other materials, and to carry out tests of soils and foundations.

Candidates must have either: (a) A University degree in civil engineering recognised by the Institution of Civil Engineers and two years' subsequent experience; or (b) a post-graduate degree in civil engineering of the Institution of Civil Engineers or obtained a recognised diploma and had not less than five years' general experience in civil engineering work. Applications will also be considered from Corporate Members of the Institutions of Structural or Municipal Engineers, or of Royal Institution of Chartered Surveyors, or who have had considerable executive experience in civil engineering construction in the field.

Contract appointment for one tour of 15-18 months in the first instance. Salary £1,416-7½ p.w. (including induction addition), plus gratuity of £150 per annum for satisfactory service. An outfit allowance of £60 is paid on salaries not exceeding £1,524 per annum. Liberal leave on full pay. Free passages for officers and wives. Quarters at low rent. Income tax at low rates. Children's allowances.

Candidates should write for application forms and further particulars, stating age, qualifications and experience, to the Appointments Secretary, Federal Public Service Commission, Nigeria House, 9 Northumberland Avenue, London, W.C.2, quoting V.3.10.

APPOINTMENTS VACANT

ROYAL COUNTY OF BERKSHIRE.

APPOINTMENT OF:
(1) SENIOR ASSISTANT ENGINEERS (TWO).
A.P.T. IV (£1,065-£1,220).
(2) JUNIOR ASSISTANT ENGINEER (ONE).
A.P.T. I (£610-£765).
(3) CLERK OF WORKS (ONE). A.P.T. I.

APPLICATIONS are invited for the ABOVE APPOINTMENTS within the prescribed grades.

Candidates for appointments (1) must be qualified and have experience in the design and construction of improvement schemes and in the supervision of contract works.

Candidates for appointment (2) are required for work in connection with road planning and control of development. They should have knowledge of highway design and road safety principles.

Candidates for appointment (3) are required for the inspection of bridging and the supervision of small bridge repair contracts.

The posts are located at the County Surveyor's Office, Reading, and will carry car allowances or the option of accepting Council-owned car or approved terms.

Forms of Application obtainable from the COUNTY SURVEYOR, Shire Hall, Reading, and returnable to him not later than 29th FEBRUARY, 1960.

BURGH OF GRANGEMOUTH.

RESIDENT ENGINEER.

APPLICATIONS are invited for the APPOINTMENT of a RESIDENT ENGINEER in the Burgh Engineer's Department at a salary on the Professional Assistants Scale (£795, rising by annual increments of £35 to £1,075, with placing according to age and experience).

Candidates should be Corporate Members of the Institution of Civil Engineers or the Institution of Municipal Engineers, and will be required to supervise the construction of minor drainage schemes.

The appointment will be a temporary one for an initial contract period of 22 months, but with the possibility, subject to satisfactory service, of extension thereof. If required, temporary housing accommodation can be provided for the successful applicant, covering the period of service.

Applications, stating age, education, experience and qualifications, together with copies of two recent testimonials, should be sent to the undersigned not later than SATURDAY, 20th February, 1960.

W. BRYCE JOHNSTON, Town Clerk.

Municipal Chambers, Grangemouth.
2nd February, 1960.

BOROUGH OF CASTLEFORD.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

APPLICATIONS are invited for the UNDERMENTIONED APPOINTMENTS in the Borough Engineer and Surveyor's Department:—
Senior Engineer, Special Grade (£785 to £1,240), depending on experience but not less than £905).

Candidates should be corporate members of the Institution of Municipal and/or Civil Engineers and have had considerable experience in a municipal engineer's office.

Assistant Architect, Grade A.P.T. I (£610 to £765).

Candidates should have passed the Intermediate R.I.B.A. Examination, or its equivalent, at one of the recognised schools of architecture.

The appointment will be a temporary one for one month's notice on either side, and National Joint Council Service Conditions. The successful applicants will be required to pass satisfactorily a medical examination.

If required, housing accommodation will be provided for single or married applicants.

Applications on forms obtainable from me, to be returned by the 5th MARCH, 1960.

Canvassing disqualifies.

ERNEST HUTCHINSON, Town Clerk.

Town Hall, Castleford.

BOROUGH OF ENFIELD.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

APPOINTMENT OF DEPUTY CLEANSING SUPERINTENDENT.

APPLICATIONS are invited for the PERMANENT APPOINTMENT of DEPUTY CLEANSING SUPERINTENDENT at a salary in accordance with Grade A.P.T. III of the National Scheme of Conditions of Service (£610-£765 per annum plus London Weighting allowance of £10-£30 per annum, according to age). The commencing salary will be in accordance with qualifications and experience.

Preference will be given to applicants who hold the Testamur of the Institute of Public Cleansing and have considerable experience in supervising collection and disposal of refuse and the maintenance of transport.

Application Forms, obtainable from MR. H. D. PEAKE, M.Sc.(Eng.), M.I.C.E., Borough Engineer and Surveyor, 7 Little Park Gardens, Enfield, Middx, to be returned to the undersigned by the 29th FEBRUARY, 1960.

CYRIL E. C. R. PLATTEN, Town Clerk.

Public Offices, Enfield, Middx.

BOROUGH OF ENFIELD.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

APPOINTMENT OF TRENCH INSPECTOR.

APPLICATIONS are invited for the ABOVE APPOINTMENT at a salary in accordance with Grade A.P.T. III of the National Scheme of Conditions of Service (£520-£590 per annum plus London Weighting allowance of £10-£30 per annum, according to age). The commencing salary will be fixed at a point within the Scale commensurate with qualifications and experience.

The duties will include inspection and supervision of trench openings by contractors and public utility undertakers, together with inspection of road surfaces, etc.

Preference will be given to applicants who are conversant with the requirements of the Public Utility Street Works Act and have experience in the keeping of records, and liaison with statutory undertakers is essential.

Application Forms, returnable by MONDAY, 29th February, 1960, to be obtained from MR. H. D. PEAKE, M.Sc.(Eng.), M.I.C.E., Borough Engineer and Surveyor, 7 Little Park Gardens, Enfield, Middx.

CYRIL E. C. R. PLATTEN, Town Clerk.

Public Offices, Enfield, Middx.

APPOINTMENTS VACANT

COUNTY BOROUGH OF ST. HELENS.

APPLICATIONS are invited for the APPOINTMENT of CHIEF ASSISTANT ENGINEER in the Borough Engineer's Department at a salary within A.P.T. Grade V (£1,220-£1,375 per annum), commencing salary to be fixed according to qualifications and experience.

Candidates must be Corporate Members of either the Institution of Civil Engineers or the Institution of Municipal Engineers.

The appointment will be terminable by one month's notice and will be subject to the Local Government Superannuation Acts, medical examination, and N.J.C. Service Conditions. The Council operates a 5-day working week.

Applications, giving the names of two referees, must be forwarded to the undersigned not later than MONDAY, 7th March, 1960.

Applicants must reveal relationship to any member or senior official of the Council.

Canvassing will disqualify.

M. WARD, M.I.Mun.E., M.T.P.I.,
A.M.I.Struct.E.,
Borough Engineer.

Town Hall,
St. Helens.

BOROUGH OF WILLESDEN.

APPLICATIONS are invited from suitably qualified and experienced persons for the FOLLOWING PERMANENT APPOINTMENTS:

- (a) Senior Engineering Assistant within Scale "A" (£612-£1,240—£3,390 p.a.)
- (b) Engineering Assistant within A.P.T. Special Grade (£785 x £40—£1,070 p.a.)
- (c) Engineering Assistant within Grade A.P.T. II (£765-£880 p.a.)
- (d) Engineering Assistant within Grade A.P.T. I (£610-£765 p.a.)

For all posts except (a) above, London Weighting maximum £30 p.a. is payable in addition to the salaries shown.

For post (a) above, preference will be given to candidates having above average experience in structural engineering or sewerage or highway works.

The Council are unable to assist with housing accommodation.

Forms of Application and Conditions of Appointment may be obtained from the Borough Engineer and Surveyor, Town Hall, Dyne Road, Kilburn, N.W.6. Applications to be returned to the undersigned not later than MONDAY, 29th February, 1960.

When writing for Application Forms, candidates must state for which appointment they wish to apply.

(Signed) R. S. FORSTER,
Town Clerk.

1st February, 1960.

BOROUGH OF WILLESDEN.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

APPLICATIONS are invited for the PERMANENT APPOINTMENT of TECHNICAL ASSISTANT. Salary within A.P.T. III (£680-£1,065 p.a.) plus London Weighting maximum £30 p.a.

Candidates should have had wide experience in the supervision and administration of minor civil engineering works undertaken by Direct Labour and Contract.

The Council are unable to assist with housing accommodation.

Details and Form of Application obtainable from the Borough Engineer and Surveyor, Town Hall, Dyne Road, Kilburn, N.W.6, and must be returned to the undersigned not later than 10 a.m. on MONDAY, 29th February, 1960.

(Signed) R. S. FORSTER,
Town Clerk.

BOROUGH OF WILLESDEN.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

APPLICATIONS are invited for the PERMANENT APPOINTMENT of CLERK OF WORKS. Salary within A.P.T. III (£880-£1,065 p.a.) plus London Weighting maximum £30 p.a. per annum.

Candidates should have wide experience in the supervision during construction of civil engineering and building works of considerable magnitude.

The Council are unable to assist with housing accommodation.

Details and Form of Application obtainable from the Borough Engineer and Surveyor, Town Hall, Dyne Road, Kilburn, N.W.6, and must be returned to the undersigned not later than 10 a.m. on MONDAY, 29th February, 1960.

(Signed) R. S. FORSTER,
Town Clerk.

BOROUGH OF WILLESDEN.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

APPLICATIONS are invited for the TWO PERMANENT APPOINTMENTS in the Building Surveyor's Section of the FOLLOWING:

General Assistants within Grade A.P.T. II (£765-£880 p.a.) plus London Weighting maximum £30 p.a. per annum.

Candidates should have had experience of the general work of a Building Surveyor's Office and the administration of building by-laws and the Town Planning Acts. For one post, experience of dealing with the control of advertisement will be an advantage. The Council cannot assist with housing accommodation.

Details and Form of Application obtainable from the BOROUGH ENGINEER, Town Hall, Dyne Road, Kilburn, N.W.6, and must be returned by 9 a.m. MONDAY, 29th February, 1960.

BOROUGH OF LEYTON.

APPOINTMENT OF CLERK OF WORKS—MAIN DRAINAGE.

APPLICATIONS are invited for the ABOVE APPOINTMENT in the Borough Engineer's Department. Salary £18-£20 per week, to be fixed within this range in accordance with experience and qualifications.

The appointment is for a period of two years, subject to satisfactory service, with the possibility of further service thereafter, to a medical examination and to the National Scheme of Conditions of Service.

Applicants should have had extensive experience on large main drainage contracts and the successful applicant will be required to commence his duties in June, 1960.

Applications, giving age, training and full details of previous experience, and the names and addresses of two persons to whom reference may be made to be received by the Borough Engineer, Town Hall, Leyton, E.10, not later than SATURDAY, 27th February, 1960.

D. J. OSBORNE,
Town Clerk.

Town Hall,
Leyton, E.10.

APPOINTMENTS VACANT

KENYA.

MINISTRY OF WORKS.
ENGINEERS (ROADS).

Qualifications: Candidates (not over 45) should have either a University degree, or equivalent, recognised by the Institution of Civil Engineers and two years' practical experience, or have passed, or be otherwise exempt from, Parts I and II of the Final Examinations of the Institution of Civil Engineers and have had not less than five years' practical experience.

Experience should include one or more of the following: (a) Location and preparation of plans and contract documents for the construction of trunk roads; (b) design of roads for traffic, urban areas, constructions, roads and bridges with modern equipment, either by contract or direct labour. Some knowledge of soil mechanics is required, and experience of soil stabilisation would be an advantage.

Duties will include all aspects of road engineering, including planning and supervision both in the office and in the field.

Terms: On contract for one tour of 24-45 months in the first instance, with salary in scale £1,194 to £1,863 p.a. and gratuity on the satisfactory completion of engagements.

Apply DIRECTOR OF RECRUITMENT, Colonial Office, London, S.W.1. Give full name and age, and brief details of qualifications and experience. Quote BCD112/7/09/D14.

HOLLAND (LINCS.) COUNTY COUNCIL.
APPOINTMENT OF SENIOR ASSISTANT ENGINEER.

A.P.T. GRADE IV (£1,065-£1,220).

APPLICATIONS are invited from qualified Civil or Municipal Engineers for the ABOVE APPOINTMENT. Applicants should have had good experience in the preparation and control of road and bridge schemes. The salary will be in accordance with A.P.T. Grade IV (£1,065-£1,220 per annum), the starting point will be determined by qualifications and experience.

The appointment is subject to the National Scheme of Conditions of Service and to the Local Government Superannuation Acts. An essential user car allowance will be paid. The Council are prepared to contribute to cost of removal.

Further particulars may be obtained from me, Applications, in a prescribed manner, should be submitted not later than 3rd MARCH.

G. E. BETTS,
County Surveyor.

County Hall,
Boston, Lincs.
8th February, 1960.

COUNTY BOROUGH OF HUDDERSFIELD.
BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

APPLICATIONS are invited for ASSISTANT ENGINEERS at a salary in accordance with Grade A.P.T. IV (£1,065 to £1,220 per annum), for work on roads, harbours, sewage works, extensions, and on general municipal engineering work.

Applicants should be Associate Members of the Institution of Civil Engineers or the Institution of Municipal Engineers.

The appointments are superannuable and subject to minimum age of 21. Canvassing is prohibited and will be considered a disqualification.

Applications, giving age, experience, and the names of not more than three referees, should reach A. L. PERCY, M.I.C.E., Borough Engineer and Surveyor, High Street Buildings, Huddersfield, not later than SATURDAY, the 5th March, 1960.

HARRY BANN,
Town Clerk.

Town Hall,
Huddersfield.
February, 1960.

BOROUGH OF BARKING.

MASON PAVIORS (T.U.) REQUIRED, hourly rate 4s. 11½d. per hour (£11 4s. 4d. per 44-hour week). Superannuation and sick benefit schemes.—Apply BOROUGH ENGINEER AND SURVEYOR, Town Hall, Barking, Essex.

BOROUGH OF ENFIELD.
BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

APPOINTMENT OF ENGINEERING ASSISTANT. (Population approx. 109,300. Area 12,401 Acres.)

APPLICATIONS are invited for the ABOVE PERMANENT APPOINTMENT at a salary in accordance with Grade A.P.T. II of the National Scheme of Conditions of Service (£765-£880 per annum, with the addition of London Weighting of £10-£30 per annum, according to age). Commencing salary will be fixed at a point within the scale commensurate with qualifications and experience.

Applicants should have completed their professional training under the scheme for the training of Municipal or Civil Engineers. Opportunity will be afforded to gain experience in all phases of Municipal Engineering.

Half days mornings are normally free of duty. Application Forms, obtainable from MR. H. D. PEAKE, M.Sc.(Eng.), M.I.C.E., Borough Engineer and Surveyor, 7 Little Park Gardens, Enfield, Middx, must be delivered to the undersigned not later than MONDAY, 29th February, 1960.

CYRIL E. C. R. PLATTEN,
Town Clerk.

Public Offices,
Enfield, Middx.

HARLOW DEVELOPMENT CORPORATION.

APPOINTMENT OF INSPECTOR/CLERK OF WORKS.

APPLICATIONS are invited for the ABOVE TEMPORARY APPOINTMENT on the Staff of the Resident Engineer to supervise the construction of sewage treatment works extensions at Rye Meads, near Hoddesdon, Hertfordshire. The successful applicant will be engaged primarily on the supervision of reinforced concrete works and pipelaying.

The salary will be within £765-£880 per annum scale, and point of entry will be according to qualifications and experience.

Experience in supervising building works is not essential, but considerable will be given to such additional qualifications in fixing the starting salary. Accommodation may be available in Harlow.

The appointment, which will be taken up in April, 1960, is expected to last about two years and will be terminable after one month's notice on either side.

Applications, signed Clerk of Works, Rye Meads, giving details of age, qualifications and experience, together with names of two referees, should reach the GENERAL MANAGER, Terlings, Harlow, Essex, before 1st MARCH, 1960.

APPOINTMENTS VACANT
NATIONAL COAL BOARD.
EAST MIDLANDS DIVISION.

CIVIL/STRUCTURAL ENGINEER REQUIRED on the permanent staff of the Chief Civil Engineer at 69 Lower Parliament Street, Nottingham. Salary within the range £900-£1,400, according to qualifications and experience.

The duties involve the design and execution of large oilfield pipelines and reconstruction schemes. Applicants should have some experience of some of the following works, preferably for industrial projects: Steel or reinforced concrete design and construction, industrial building construction, drainage and sewerage, railway sidings, docks and ancillary services. Candidates should be Associate Members of the Institution of Civil or Structural Engineers.

Applications, giving age and full details of education, qualifications, experience, present position, and salary, in writing, within seven days, quoting S.V.030, to DIRECTOR, CHIEF STAFF OFFICER, National Coal Board, East Midlands Division, Sherwood Lodge, Arnold, near Nottingham.

LONDON COUNTY COUNCIL.

CLERKS OF WORKS REQUIRED on multi-storey housing schemes, to act in first instance as Assistants. Commencing salaries between £815 and £890, with scope for advancement to senior posts for men of ability.

Applicants should possess sound knowledge of building construction, have served full trade apprenticeship and had experience in supervisory capacity on multi-storey housing contracts. Experience in reinforced concrete work an advantage.

Application Form, returnable by 5th MARCH, from ARCHITECT, EK/29/60, County Hall, S.E.1. (283).

COUNTY BOROUGH OF PRESTON.

APPLICATIONS are invited for a SENIOR QUANTITY SURVEYOR in the Borough Engineer and Surveyor's Department. Salary, £1,065-£1,220 per annum, commencing figure to be fixed according to qualifications and experience.

Candidates should be chartered surveyors, and have had extensive experience in the preparation of Bills of Quantities and Estimates, valuation of works in progress, and setting-out and accounts.

The National Scheme of Conditions of Service and Local Government Superannuation Act apply to the appointment, and the successful candidate will be required to pass a medical examination.

Further particulars may be obtained from the undersigned to whom they must be returned completed by 7th MARCH, 1960.

W. E. E. LOCKLEY,
Town Clerk.

Municipal Building,
Preston.

METROPOLITAN BOROUGH OF CAMBERWELL.

CLERK OF WORKS.

APPLICATIONS invited for this POST in Borough Engineer and Surveyor's Department at a salary of £15 per week. The appointment is in connection with the widening of part of Lordship Lane and will be for a period of approximately six months, commencing in June. Applicants must have a sound experience in setting out, levelling and construction of roadworks, including the laying of hot-rolled and mastic asphalt. Duties will include the supervision of contractors, site visits, reports and reports. Applications, stating age and experience, together with names of two referees, to TOWN CLERK, Town Hall, S.E.5, by MONDAY, 7th March, 1960.

BOROUGH OF BARKING.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

APPLICATIONS are invited for the APPOINTMENT of an ASSISTANT HIGHWAYS SUPERINTENDENT within Grade A.P.T. (Salary scale £765-£880), plus appropriate London Weighting. The commencing salary will be dependent upon qualifications and experience. Candidates should have had general experience in the setting-out and control of public works, in particular road and similar works. The Council are carrying out a large and varied programme of constructional schemes by Direct Labour, involving the wide use of mechanical equipment and plant.

Preference will be given to applicants who are members of the Institute of Works and Highways Superintendents.

Applications, on forms which may be obtained from the Borough Engineer and Surveyor, Town Hall, Barking, should be returned to the undersigned not later than 9 a.m. on the 25th FEBRUARY, 1960.

E. R. FARR,
Town Clerk.

Town Hall,
Barking, Essex.

FORMBY URBAN DISTRICT COUNCIL.

AMENDED ADVERTISEMENT.

CONSTRUCTION OF SEWAGE DISPOSAL WORKS.

APPOINTMENT OF RESIDENT ENGINEER.

APPLICATIONS are invited from experienced persons for appointment as RESIDENT ENGINEER, to supervise the construction of the above works under the direction of the consulting engineers.

Subject to satisfactory service, it is expected that the appointment will be for a period of 15 months and the salary will be £1,250 per annum.

Housing accommodation will be provided, if necessary.

Applications, stating age, qualifications, and giving full particulars of experience, together with the names of three referees or previous employers to whom reference can be made, should be referred to the CLERK OF THE COUNCIL, Council Office, Formby, near Liverpool, not later than SATURDAY, 27th February, 1960.

BASILDON DEVELOPMENT CORPORATION.

CHIEF ENGINEER'S DEPARTMENT.

APPOINTMENT OF CLERK OF WORKS.

APPLICATIONS are invited for the ABOVE APPOINTMENT within the salary scale £765-£880 per annum. Candidates should be experienced in the supervision of the construction of roads, sewers, footways, services, etc. Experience of setting-out and measurement of contract work would be an advantage. The successful candidate will be required to supervise a contract of about 12 months' duration, with possible further contracts to follow.

The appointment is superannuable and subject to one month's notice on either side.

Applications, stating age, details of experience, and names of three referees, should be sent to the GENERAL MANAGER, Gifford House, Basildon, Essex, by WEDNESDAY, 24th February, 1960, quoting Ref. No. GM6896.

APPOINTMENTS VACANT

BRITISH SOLOMON ISLANDS PROTECTORATE.

CIVIL ENGINEERS.

PUBLIC WORKS DEPARTMENT.

Qualifications: Candidates, preferably under 35, should have either a University degree, or equivalent, recognised by the Institution of Civil Engineers, plus two years' practical experience, or have passed, or be otherwise exempt from, Parts I and II of the Final Examinations of the Institution of Civil Engineers and have had not less than five years' practical experience.

The duties involve the design and execution of large oilfield pipelines and reconstruction schemes. Applicants should have some experience of some of the following works, preferably for industrial projects: Steel or reinforced concrete design and construction, industrial building construction, drainage and sewerage, railway sidings, docks and ancillary services. Candidates should be Associate Members of the Institution of Civil or Structural Engineers.

Applications, giving age and full details of education,

experience, present position, and salary, in writing, within seven days, quoting S.V.030, to DIRECTOR, CHIEF STAFF OFFICER, National Coal Board, East Midlands Division, Sherwood Lodge, Arnold, near Nottingham.

Duties: The design and supervision of civil engineering works, including roads, bridges, water supplies, airfields, etc.

Terms: Appointment either permanent and pensionable, subject to probation, or on contract, with or without Emoluments, salary scale £960 to £1,860 pensionable, or £1,152 to £1,860 on contract. Free passages. Taxation at local rates. Generous home leave.

Apply: DIRECTOR OF RECRUITMENT, Colonial Office, London, S.W.1. Give full name and brief details of age, qualifications and experience. Quote BCD112/45/04/D14.

BRITISH TRANSPORT COMMISSION.

BRITISH TRANSPORT DOCKS invite APPLICATIONS FOR RESIDENT ENGINEER at King George Dock, Hull. He will be responsible to the Chief Docks Engineer for the supervision of a series of civil engineering contracts (aggregate value some £3m.), extending over a period of about three years, including the construction of reinforced concrete quays, steel-frame transit sheds, concrete and brick buildings, extensive roadworks, and permanent way installations.

A candidate for this position must be a Chartered Civil Engineer with considerable experience in dock and harbour engineering construction, including piling, and be available if selected, to take up the appointment at an early date.

Salary, according to qualifications and experience, in the region of £1,500 per annum.

Applications, giving particulars of age, qualifications, experience and referees, to STAFF AND ESTABLISHMENT OFFICER, British Transport Docks (C.I.), 163, Euston Road, London, N.W.1, to arrive not later than FRIDAY, 26th February, 1960.

COUNTY BOROUGH OF EAST HAM.

ENGINEERING ASSISTANTS—A.P.T.I.—
SALARY UP TO £795 PER ANNUM.

Subsistence allowances may be granted over a reasonable period to the persons appointed if unable to obtain suitable living accommodation, necessitating the maintenance of two homes.

Further details and Application Forms, returnable by 4th MARCH, 1960, from the TOWN CLERK, Town Hall, East Ham, E.6.

COUNTY BOROUGH OF EAST HAM.

APPLICATIONS are invited for the FOLLOWING TEMPORARY APPOINTMENT of approx. 12 months on a contract at Hutton. Applicants must have had comprehensive experience, preferably in a similar position.

**Clerk of Works (Roads and Sewers), A.P.T. I—
Salary up to £795 per annum.**

Forms of application, returnable by 4th MARCH, 1960, from the TOWN CLERK, Town Hall, East Ham, E.6.

METROPOLITAN WATER BOARD.

GANGER, with civil engineering experience, REQUIRED by Metropolitan Water Board for general work on new river between Hoddesdon and Ware. Work 44-hour week. Appointment to pensionable staff position to suitable candidate after 12 months' service.

Written applications, stating age and experience, to Resident Engineer, M.W.B. Works, Lea Bridge Road, E.8.

Canvassing disqualifies and relationship to any member, officer or employee must be disclosed.

S. D. ASKEW,
Clerk of the Board.

TOWCESTER RURAL DISTRICT COUNCIL.

DEPUTY RESIDENT ENGINEER REQUIRED immediately, to supervise the construction of sewers and drainage disposal works at Ainsthorpe. Salary up to £1,000 per annum. Applications to HOWARD HUMPHREYS AND SONS, Victoria Station House, Victoria, London, S.W.1. Please quote ref. 391.

COVENTRY CORPORATION.

JUNIOR ASSISTANT ENGINEERS REQUIRED in connection with a comprehensive main drainage capital works programme involving an initial expenditure of over £1m. during the next few years.

Salaries grade (up to Special, £785-£1,070), and commencing salaries according to qualifications/experience.

Housing accommodation may be available, together with removal expenses loan.

Application Forms from CITY ENGINEER, Council House, Coventry, returnable by 29th FEBRUARY.

COVENTRY CORPORATION.

THE FOLLOWING STAFF REQUIRED for Civil and Structural Engineering Section:

(a) Assistant Engineer (Civil Engineering)—Grade A.P.T. III (£1,065-£1,220). Commencing according to qualifications/experience. Some previous experience design and construction of highway bridges and foundations desirable.

(b) Assistant Engineers (Structural)—Grade A.P.T. IV (£1,065-£1,220). Commencing according to qualifications/experience. Previous experience design and detailing reinforced concrete and/or steel structures essential.

Programme of major development works offers exceptional opportunities for experience of interesting and varied nature. Appropriate professional qualifications and experience in design and construction of major structures. Housing accommodation may be available, together with removal expenses loan.

Application Forms from CITY ENGINEER, Council House, Coventry, returnable by 29th FEBRUARY.

SUPERVISOR REQUIRED for erection of precast concrete flooring. Previous experience in this class of work preferred, design experience essential. Applicants must be capable of taking responsibility and progressing work from design stage to completion. Excellent opportunity for man with drive, initiative and ability. — Write Box V.1207, "The Contract Journal."

GEE, WALKER AND SLATER, LTD. require experienced SITE ENGINEERS for building and civil engineering contracts in the London area.—Write, giving details of experience, salary required, and when available, to 100 Park Lane, W.1.

APPOINTMENTS VACANT

ASSISTANT ESTIMATING SURVEYOR REQUIRED by national firm of contractors at their Middlesex office. Must be experienced in the preparation of bills of quantities and be able to prepare material schedules for ordering.—Write giving full particulars of age, experience and salary required, to Box V.1194, "The Contract Journal."

SITE CASHIER. Applications invited from experienced men who have been site cashiers for at least the past five years and bonded and worked for a reputable national contractor, for large jobs in the Midlands area. Top salary and expenses offered to the right man.—**WILSON LOVATT AND SONS, LTD.**, Clarence Street, Wolverhampton.

SURVEYOR. Applications invited from men, aged 25-45, who have had recent past experience in successful handling of final accounts for large building contracts works, including monthly certificates and variations, etc. Working from Wolverhampton as a base and visiting several jobs.—Applications should give full details of recent record of employment with a similar company, and remuneration, addressing to Personnel Manager, **WILSON LOVATT AND SONS, LTD.**, Clarence Street, Wolverhampton.

GENERAL FOREMAN REQUIRED by national contractors for speculative housing in the Reading and Southampton areas. Permanent well-paid pensionable positions for experienced men.—Full particulars to Box V.1195, "The Contract Journal."

GENERAL FOREMAN (Building). Applications invited from Senior General Foremen who are at the top of their grade and have handled large building contracts in recent years, using initiative in research and development of new materials and modern techniques, for work in the Midlands area. Carpenter and Joiner background preferred. A good salary and expenses and other staff terms will be available to the successful applicant.—**WILSON LOVATT AND SONS, LTD.**, Clarence Street, Wolverhampton.

QUALITY SURVEYOR REQUIRED for building construction involving all trades. Huddersfield office.—Write Box V.1081, "The Contract Journal."

BRITISH CONSTRUCTIONAL STEELWORK ASSOCIATION

Applications are invited for APPOINTMENTS to the development staff and to the bridge department. Candidates should be young men with some experience in the design and detailing of steel-frame buildings, with knowledge of B.S.449, or with experience in the design of steel bridges, with knowledge of S.S.153. 5 day week and luncheon vouchers. Admission to non-contributory pension scheme after qualifying period. Apply, in confidence, giving fullest details, with salary required, to:

The Technical Adviser,

BRITISH CONSTRUCTIONAL STEELWORK ASSOCIATION,
Artillery House, Artillery Row, London, S.W.1.

CIVIL ENGINEERING ESTIMATORS REQUIRED by **SHEPHARD, HILL AND CO., LTD.**, to work from London office. Preference will be given to Engineers having practical knowledge, age between 25-35 years, and qualifications should include ability to work on own initiative. Top salary and allowances will be paid to the successful applicants.—Write, giving full details, to Managing Director, **SHEPHARD, HILL AND CO., LTD.**, 25/27 Central Chambers, W.S.

LANDSCAPE CONTRACTOR REQUIRES WORKING ASSISTANT this spring, with drive and initiative, for work connected with sportsfields, swimming pools, housing estates, etc.—Write, giving full particulars of experience and wages required, to Box V.1089, "The Contract Journal."

CIVIL ENGINEERING ESTIMATOR. Applications invited from experienced men qualified and having spent recent years estimating for civil engineering work, including reinforced concrete, with well known contracting firms. Applications will be treated in strict confidence and should be addressed to **WILSON LOVATT AND SONS, LTD.**, Clarence Street, Wolverhampton.

THOMAS LOWE AND SONS, LTD., of Curzon Street, Burton-on-Trent, have a vacancy for a GENERAL FOREMAN capable of taking charge of building contracts in the Birmingham area up to a value of £200,000.—Applications should be submitted in writing, stating age, experience and salary required.

BUILDING SURVEYOR/ESTIMATOR

REQUIRED BY **W. H. ALLEN, SONS AND CO., LTD.** The successful applicant will be responsible to the works engineer for the introduction and later, operation and maintenance of a progressive business building maintenance scheme. Age should be between 25-35 years, and qualifications should include, for preference, A.R.I.C.S. The company has an excellent pension and life assurance scheme in operation, and offers good working conditions and welfare amenities. Applications in writing, stating details of past experience and present salary, and quoting Ref. 1602/CY, should be forwarded to:

The Personnel Manager,
W. H. ALLEN, SONS AND CO., LTD.,
Bedford.

THOMAS LOWE AND SONS, LTD., of Curzon Street, Burton-on-Trent, have a vacancy in their Birmingham office for a PLANNING ENGINEER to organise preplanning, progressing and bonusing. Previous experience not essential but knowledge of site organisation is necessary. Consideration will be given to applications from persons previously engaged in this work.—Applications should be submitted in writing, stating age, experience, and salary required.

BUILDING SURVEYORS REQUIRED by a national building and civil engineering contractor. These positions are permanent, progressive and superannuated.—Write, giving full details, salary required, and areas preferred, to Box No. C1907, L.P.E., Romano House, 399/401 Strand, London, W.C.2.

NATIONALLY known plant hire company, opening new offices and works in the Manchester area, REQUIRE the services of a fully experienced man to take charge of the hire department and work under area manager. Must be conversant with the full range of contractors' plant and machinery, hire rates, wages, records, etc. Preference would be given to men with local connections, but this would not exclude other applicants. Good salary and pension scheme in existence. Present employees of company have been informed of this vacancy.—Please write, stating age and full details of experience, to Box V.1188, "The Contract Journal."

APPOINTMENTS VACANT

JUNIOR ENGINEER, with site experience and capable draughtsman, REQUIRED by company specialising in formwork and temporary structures. Salary by arrangement.—Write brief details to **GUYREX EQUIPMENT, LTD.**, 25 Craven Street, London, W.C.2.

QUANTITY SURVEYOR/ESTIMATOR to deal with inquiries, interim certificates and final accounts. REQUIRED for building and civil engineering contractors. Pension and life assurance scheme. Applicant required to be car driver and aged under 40.—Apply by letter, stating experience and salary required, to **T. HOLDOWAY AND SONS, LTD.**, Westbury, Wilts.

EXPERIENCED ASSISTANTS REQUIRED for surveyors' department of expanding building and civil engineering contractors. Pension and life assurance scheme.—Apply by letter, stating age, experience and salary, to **T. HOLDOWAY AND SONS, LTD.**, Westbury, Wilts.

ESTABLISHED company of building and civil engineering contractors REQUIRE an ASSISTANT ENGINEER for head office duties in connection with large-scale water and gas main laying contracts throughout the country. Applications should preferably be technically qualified, understand modern pipeline techniques, including welded steel mains, and have had a period in a responsible position on main-laying contracts. Duties will comprise all aspects of contract planning, liaison with site head office, material ordering and control, and general duties as Assistant to the Contracts Manager. This appointment is required due to the expansion of the division. A permanent position is intended and a superannuation scheme will be operated. Applicants should write in the first instance for an application form, which will be treated in strict confidence.—Apply to Ref. G.W.A. THE NORWEST CONSTRUCTION CO., LTD., Ruthven Road, Litherland, Liverpool, 21.

SENIOR SITE AGENTS

Capable men accustomed to handling contracts in the region of £500,000 are REQUIRED by leading building contractors for their Manchester branch. Superannuation scheme in operation.—Apply, with full details, to:

BERNARD SUNLEY AND SONS, LTD.,
Portland Street, Manchester, 1.

FOREMAN FITTER REQUIRED by nationally known plant hire company opening new offices and works in the Manchester area. Must be conversant with the full range of medium-size contractors' plant and equipment. It is a permanent job for the right man; fixed salary would be paid, with participation in profit-sharing and pension scheme or, if preferred, hourly rate.—Please write, stating age and full details of previous experience, to Box V.1189, "The Contract Journal."

CONTRACTOR'S SURVEYOR REQUIRED for an expanding firm of reinforced concrete specialists. Applicants, preferably 25-35, must have experience in the field of interim valuations, with some knowledge of taking-off and price building for all trades. This is an excellent opening for a man with drive and initiative to secure a progressive position in a well-established firm with good connections. Give details of age, experience and present salary to Chief Surveyor, **THOMAS FERRO-CONCRETE CO., LTD.**, Matlock Road, Hemel Hempstead, Herts.

RUDDOCK AND MEIGAN, LTD., have a vacancy for an ENGINEER AGENT. Candidates need not necessarily be qualified but must have had good experience in general civil engineering works. Permanent position and good opportunity for advancement. Pension scheme in operation.—Apply, giving details of age, experience, and indication of Middlesex.

CONSULTING ENGINEERS have vacancies for JUNIOR ASSISTANTS for water supply and sewerage work in the West of England. Salary will be according to age and experience.—Full details to Box V.1170, "The Contract Journal."

DESIGNER - DRAUGHTSMAN REQUIRED for office engaged in precast concrete and in-situ floors. Previous experience preferred but applicants with suitable experience will be considered provided they are adaptable and competent draughtsmen.—Write Box V.1208, "The Contract Journal."

CAN YOU SELL PLANT?

HANGERS PLANT DIVISION need a top-class SALESMAN to sell contractors' plant. Successful applicant must have the following qualifications: (1) Have proven sales record (preferably in contractors' plant). (2) Between 25 and 35 years old.

(3) Currently be earning at least £1,000 per annum, and not satisfied with present income. Remuneration will be by salary and commission on profit, which will enable a good man to earn at least £1,250 per annum, and an outstanding man much more. This vacancy is for a man that can really sell and enjoys doing so. Hangers, in addition to being sole distributor for J.C.W. Earthmoving equipment for Warks., Warwicks. and South Staffs., have agencies for Liner dumpers and concrete machinery, Allam vibrators, Romano scrapers, County Crawler tractors, Onions scrapers. Our advertising and sales promotional activities give every support to our sales staff.—Write, giving background of experience and all pertinent personal information, in confidence, to:

Plant Manager,
HANGERS PLANT DIVISION,
2 Leicester Road, Bromsgrove.

EXPERIENCED SURVEYOR REQUIRED for interim valuations and final accounts for civil engineering contracts. To operate from head office. Permanent position with pension rights.—Write in confidence, giving age, details of experience, previous employers, and salary required, to General Manager, **TILBURY CONSTRUCTION CO., LTD.**, Ruscombe Works, Twyford, Berks.

AGENT and SITE ENGINEER REQUIRED for road contracts, by expanding firm of contractors. Top salary and prospects for men with ambitions.—Apply **GALLIFORD AND SONS, LTD.**, Wolvey, Hinckley, Leicestershire.

FENCING EXPERT REQUIRED, capable of working on own initiative and able to negotiate at top level. Only gentlemen conversant with all aspects of wood fencing, etc., including costings, contracts and supervision of work, etc., are invited to apply. Good salary offered to right man. Present staff advised of vacancy.—Write Box V.9812, "The Contract Journal."

APPOINTMENTS VACANT

YOUNG Graduate CIVIL ENGINEER REQUIRED by old-established firm dredging contractors. Previous experience not essential. Employment on permanent basis, with full staff benefits, for right man.—Write Box V.1054, "The Contract Journal."

ROBERT M. DOUGLAS (CONTRACTORS), LTD., Quantity Surveyors REQUIRED for work in Great Britain, with at least three years' experience of final accounts for civil engineering and building works of £100,000 and above. Excellent prospects for men of initiative and ability. Remuneration by arrangement. Pension scheme.—Write, giving details of age, education, experience, and salary, to 395 George Road, Erdington, Birmingham, 23.

ROBERT M. DOUGLAS (CONTRACTORS), LTD., REQUIRE AGENTS, SUB-AGENTS, GENERAL FOREMEN, FOREMEN, and GANGERS for work in general civil engineering and building works, in any part of the country.—Apply in writing, stating age, experience, qualifications, and salary required, to 395 George Road, Birmingham, 23.

CAPABLE MAN REQUIRED for plant hire department. Good prospects for the right man. Write, giving details, to **METROPLANT, LTD.**, 169/171 Cricklewood Broadway, London, N.W.2.

WANTED, SITE CLERK for contracts in Devon and Cornwall. Permanent. Good remuneration and assistance paid to suitable applicant. Write Box V.1180, "The Contract Journal."

CIVIL ENGINEERS—INDIA

Applications are invited for vacancies on a heavy civil engineering project in India as follows:

SENIOR ENGINEER

With considerable contracting experience as agent, or senior engineer on large projects, to take charge of construction in a major area with turnover of approximately £100,000 per month. Salary in the region of £2,750 p.m. tax free.

SECTION ENGINEERS

28-35 years of age, with contracting experience on medium to large projects as engineer or sub-agent. Salaries in the region of £2,500 p.m. tax free. Tours are for 18 months on a single basis, though for the senior appointment only family accommodation may be available at a later date. A site bonus scheme is in operation.—Please write, giving brief details of experience and qualifications, to:

The Personnel Officer,
THE CEMENTATION CO., LTD.,
20 Albert Embankment, London, S.E.11.

ENGINEER: Housing Development division (centred in Surrey) of substantial construction company SEEK services of an ENGINEER, age 25-35, for work on the design of housing estate schemes, including site surveys and preparation of drawings. Good knowledge of sewerage and road design and good draughtsmanship essential. Pensionable, permanent position with good prospects. Assistance can be given with living accommodation.—Apply, stating age and qualifications, commencing salary required, and giving full details, to Box V.1211, "The Contract Journal."

JAMAICA—TECHNICAL SALES REPRESENTATIVE REQUIRED for leading distributor of earthmoving and allied equipment. Sound technical knowledge and wide practical experience essential. Applicant should be single, between ages of 26 and 44. Excellent prospects.—Write in strictest confidence, giving full details of previous employment and types of equipment handled, to Box V.1200, "The Contract Journal."

M.I.C.E. REQUIRED, aged about 35, for a virile and expanding firm. Must be first-class engineer and estimator with the drive, personality and administrative ability needed to produce results; capable of controlling throughout medium-sized road, sewer, bridge, etc., contracts from tendering, setting out, site measurements to final certificate. Prospects unlimited. A man of the right calibre, even if not academically qualified, would also be considered. Write, giving fullest particulars and salary required, to **FARMILODE AND MCIVIE, LTD.**, 10 High Street, Welwyn, Hertfordshire.

COST AND MEASURING SURVEYOR REQUIRED for building and civil engineering. Apply in confidence, giving details of education, training, age, and approx. salary required, to **RILEY AND WHISHAW, LTD.**, Haslemere, Surrey.

SURFACE MAINTENANCE SERVICES, LTD.

REQUIRE contract site staff for the following vacancies on civil engineering contracts in the Home and Southern Counties:

ENGINEER AGENTS

Several years' experience with contractors in charge of general civil engineering contracts up to £100,000. Site Engineers

Experienced in setting out, measuring for interim accounts, design of temporary works, etc.

GENERAL FOREMEN

Preferably tradesmen, experienced in control of road works, including bridging, etc.

SECTION ENGINEERS

Experienced in heavy drainage and surface work. The positions offered are permanent with excellent opportunities of promotion.—Applicants should write, giving full details of past experience, name of present employer, date available, and quoting two references, to:

Personnel Manager,
SURFACE MAINTENANCE SERVICES, LTD.,
124 Old Christchurch Road, Bournemouth.

ASSISTANT CIVIL ENGINEERS REQUIRED for contracts in the North of England. Applicants must be accurate with instruments and have initiative, drive, and have had site experience.—Write, stating age, experience and salary required, to Box V.1210, "The Contract Journal."

SURFACING CONTRACTORS REQUIRE an ASSISTANT to MANAGER in London area. Must be experienced in the preparation, supervision of tarmac and asphalt contracts and prepare final accounts.—Write, stating previous experience and salary required, Box V.1178, "The Contract Journal."

FOREMAN REQUIRED immediately for south-western area. Experienced in general road work, drainage, etc. Permanent position.

Reply Box V.1212, "The Contract Journal."

SITE AGENTS and **GENERAL FOREMEN**. If you can earn a high salary and are competent to accept one of these appointments for housing and flat construction in the Midlands and elsewhere, apply J. Wright, C. BRYANT AND SON, LTD., Whitmore Road, Small Heath, Birmingham, 10.

APPOINTMENTS VACANT

REQUIRED: ENGINEERS for planning and design offices. Applicants must have had experience in planning of civil engineering or building structures or design of reinforced concrete and temporary structures. Salary commensurate with experience. Bonus and pension scheme in operation. Applications should be addressed to Personnel Officer, TARMAC CIVIL ENGINEERING LTD., Ettingshall, Wolverhampton.

OFFICE MANAGER REQUIRED for builders' office in Hammersmith. Experienced in industry and able to keep costs and accounts. —Reply to Box V.1147, "The Contract Journal," quoting Ref. QRS/7.

JUNIOR SURVEYOR REQUIRED for civil engineering and building contractors in Middlesex. Applicants must be capable of preparing site measurements for interim final accounts and sub-contractors. Good prospects for a young man with initiative. —Write, giving full details of experience, age, and salary required, to Box V.1196, "The Contract Journal."

SHELLABEAR PRICE, LTD.

REQUIRE experienced SITE ENGINEERS for major roadworks in Lincolnshire and Elsewhere.

SHELLABEAR PRICE, LTD.

Auckland House, New Zealand Avenue, Walton-on-Thames, Surrey.

TARSLAG, LTD., have vacancies for experienced SITE ENGINEERS who wish to undertake more responsible positions as SUB-AGENTS and SENIOR ENGINEERS on various interesting contracts centralised in North Midlands. Age 25 to 30, with a minimum of five years' contracting experience. —Apply to Upper Wortley Road, Rotherham.

GENERAL FOREMAN REQUIRED for private estate development in Shrewsbury. About 100 houses annually. All trades, including roadmaking and sewerage. —Apply FLETCHER ESTATES (HARLESCOTT), LTD., Whitchurch Road, Shrewsbury. Tel. 4436.

ROOFING CONTRACTORS, old-established in the Midlands, require GENERAL FOREMAN, experienced for first-class work with sound, practical knowledge of slating and tiling. —Reply, stating age, qualifications, and salary required, to Box V.1174, "The Contract Journal."

ENGINEER-AGENT REQUIRED for large contract in the Midlands. Applicants must be thoroughly experienced in reinforced concrete and deep excavation. This post offers excellent prospects in an expanding organisation. —Applicants should apply in writing, giving full details of past experience, age, qualifications, etc., to: MANAGING DIRECTOR, 11 Booth Street, Birmingham, 21.

TRAINEE DRAUGHTSMEN

HUMPHREYS AND GLASGOW, LTD., are prepared to train skilled CARPENTERS as CIVIL ENGINEERING DRAUGHTSMEN. Applications, in writing, giving full details of experience, etc., are invited from men willing to learn and work hard to improve their future prospects. Salary increases at six-monthly intervals during training. Five-day week. Pension scheme. Applications should be addressed to:

H. Liddle,
HUMPHREYS AND GLASGOW, LTD.,
22 Carlisle Place, London, S.W.1.

CIVIL ENGINEER for road works, based on Glasgow, by old-established company. Capable of setting out works and taking control of site and site supervision. The position is permanent and pensionable, with good prospects of advancement for a man with drive and initiative. Our staff notified. —Write in confidence, giving details of age, experience and salary required, to Box V.1203, "The Contract Journal."

GENERAL FOREMAN (civil engineering): Applications invited from Senior General Foremen, top their grade in reinforced concrete work of all classes, including factories and works for the Midlands area. Experience in using initiative in site administration with minimum of supervision and practical application of all modern techniques. —Send full details of training and experience to WILSON LOVATT AND SONS, LTD., Clarence Street, Wolverhampton.

AGENTS REQUIRED, fully experienced in control from start to final certificate, working from head office: (1) Schools, factories, and similar public and private buildings; (2) roads, sewers, and other civil engineering works. Excellent terms and prospects for right men. Bonus and pension schemes in operation. —Applications to: WINTON HAYES, LTD., Biggleswade, Beds.

SENIOR SURVEYOR

A vacancy exists with well-known building and civil engineering contractors in West Middlesex for a SENIOR SURVEYOR with sound knowledge and experience of surveying and financial accounts. A salary range of £1,250/£1,500 will be offered to the applicant of proved ability, possessing initiative and drive. Pension and bonus schemes in operation. —Full particulars to:

BOX V.1197, "THE CONTRACT JOURNAL."

TAKER-OFF REQUIRED by national contractors in their West Middlesex office. He will be required to assist Chief Estimator in connection with future tenders, including housing. This is a permanent and progressive appointment, with scope for right man. —Write Box V.1223, "The Contract Journal."

DRESTRESSED CONCRETE SUPERVISOR WANTED by well-established company for works on western outskirts of London. Applicant must have wide experience of various systems and be able to deal with all aspects of labour utilisation, production and quality control. The post is pensionable and offers excellent prospects to the right man. —Applicants should be notified of the vacancy. —Please write, giving full confidence, full details of experience, age and salary required, to Box V.1204, "The Contract Journal."

LAND SURVEYOR or JUNIOR CIVIL ENGINEER. A vacancy has occurred for either a Land Surveyor, preferably used to high-transmission line survey, or a Junior Civil Engineer with extensive experience in survey work. Interesting work both at home and overseas. Overseas contracts of short duration only. Existing salary and age right applicants. —Please write, giving details of experience, etc., to: BRITISH ROPEWAY ENGINEERING CO., LTD., Plantation House, Mincing Lane, London, E.C.3.

THE CONTRACT JOURNAL

APPOINTMENTS VACANT

EXPERIENCED, qualified ENGINEER/AGENT to take full site responsibility of £1m. prestressed concrete structural, salary commensurate with responsibility. Progressive position with growing organisation. —Full particulars to Box V.1222, "The Contract Journal."

FIRM of leading civil engineering contractors REQUIRE COMPETENT MANAGERS to manage the central stores department attached to their plant depot near London. —State experience and salary required to Box V.1255, "The Contract Journal."

GEORGE WIMPEY AND CO., LTD., REQUIRE CIVIL ENGINEERING FOREMEN who are familiar with ground works to building sites: also men experienced in roads and sewers, and heavy civil engineering works. Writing to: George Wimpey and Co., Ltd., Good remuneration offered to the right men. —Write, stating age and experience, to the Estimating Office, 100 Hammersmith Grove, London, W.6. (Ref. 884G.)

BUILDING MANAGER

WM. TOWNSON AND SONS, LTD., REQUIRE a MANAGER to take charge of their main building activities in the North of England. The successful applicant will be aged between 45 and 55, will have had a wide variety of building experience, including multi-storey flats, houses, schools, hospitals, industrial work and some civil engineering work. He should also be able to use the services of a planning department and have acquaintance with modern departmental techniques in the building industry. The commanding salary will be in the range £1,500-£1,750, and there will be further prospects of advancement for the right man. There is a pension and life assurance scheme, and a company car will be provided. Applications, stating education, age and experience, and marking the envelope BM/2, should be sent, in confidence, to:

The Secretary,
WM. TOWNSON AND SONS, LTD.,
Higher Swan Lane, Bolton.

SITE ENGINEER REQUIRED by small contractor. Able to set-out and control road and sewer works. Excellent prospects to energetic young man. —Car provided. —Write Box V.1225, "The Contract Journal."

OFFICE MANAGER REQUIRED by small contractor. Capable of handling wages, accounts, etc., for various sites. —Write Box V.1226, "The Contract Journal."

TECHNICAL REPRESENTATIVE REQUIRED for civil engineering contractors specialising in concrete pumping, grouting, and other power applications. Existing connection with civil engineering consultants, local authorities, contractors, etc., in Lancashire and West Midlands area. Four-figure salary, expenses and car. —AEROCEM (SCOTLAND), LTD., 21 Blythswood Square, Glasgow, C.2.

SALES ENGINEER. — Experienced Sales Engineer REQUIRED to sell the Bristol range of earth-moving equipment in Central England. A thorough knowledge of, and active connection with, the trade is essential. Superannuation scheme. Salary and commission. —Car provided. —Write, giving full information of previous experience, age, qualifications, etc., to H. A. SAUNDERS, LTD., 14-20 The Butts, Worcester.

ENGINEER/ESTIMATOR

REQUIRED for large building and civil engineering contractors. Several years' experience of site work, essential, combined with considerable enthusiasm for estimating and tender stage planning. Age 30 to 40, plus parts A and B of A.M.I.C.E. or equivalent desirable. The post is permanent, pensionable, and offers considerable opportunity to the right applicant. Own staff notified of vacancy. —Write, giving full details of qualifications and experience, and quoting Ref. E995, to:

BOX V.1176, "THE CONTRACT JOURNAL."

THE NORWEST CONSTRUCTION CO., LTD., Ruthven Road, Liverpool, 21, invite applications from AGENTS, SUB-AGENTS, FOREMEN-AGENTS, fully experienced in Post, Office, Civil and marine building contracts. These positions are permanent and progressive. Good salary and bonus, and a superannuation scheme in operation. Successful applicants required to travel to different areas throughout the U.K. —Apply in writing, with full details of previous experience.

SENIOR and JUNIOR SITE ENGINEERS are REQUIRED for contracts in England and South Wales. These are permanent appointments with good prospects. Bonus and superannuation scheme in operation. —Applications which will be dealt with in strict confidence, must give details of age, experience, qualifications, and salary required, and should be addressed to Personnel Officer, TARMAC CIVIL ENGINEERING LTD., Ettingshall, Wolverhampton.

DIAMOND DRILLER REQUIRED for large opencast mine in Ghana. Salary according to experience and qualifications. Liberal life and accident insurances, kit and bungalow allowances. Free passage for self and wife, each way (no children allowed on the Mine), free housing, training, and medical attendance. Three months' leave in U.K. on full pay after completion of 12 months' tour. Engagement subject to satisfactory medical examination. —Write full particulars to Box "C.Z." c/o J. W. Vickers and Co., LTD., 7/8 Great Winchester Street, London, E.C.2.

NUCLEAR CIVIL CONSTRUCTORS

REQUIRE the services of GENERAL and SECTION FOREMEN at their contract for the construction of Trawsfynydd Major Power Station, North Wales. Applications, with full details of previous experience, and full personal details, should be addressed to:

Mr. T. J. Winter, Business Manager,
NUCLEAR CIVIL CONSTRUCTORS,
Nuclear Power Station, Trawsfynydd, Merionethshire.

CIVIL ENGINEERS REQUIRED by contractors for reinforced concrete and road construction in Midlands. Permanent positions for satisfactory applicants, with participation in superannuation scheme after trial period. —Reply, with details of previous employment and date available, to Box V.1241, "The Contract Journal."

ENGINEER, capable of pricing sub-contract work and carrying through to final certificate. Possibility of advancement to position of general manager of department or directorship. Must be capable of supervising contracts. —SMITHS PLANT HIRE AND CONTRACTORS, LTD., Southam Court, 98 Prestbury Road, Cheltenham.

February 18 1960

APPOINTMENTS VACANT

VACANCIES occur for **GENERAL FOREMEN**. Must be fully conversant with the construction of schools, public buildings and other large contracts, especially concrete structures involving reinforcing and shuttering. Theoretical qualifications an advantage. Commencing salary £750 per annum. Building company operates in the south-west part of Warwickshire and adjoining counties. —Application forms available from Box V.1209, "The Contract Journal."

THE 143 PLANT REGT. ROYAL ENGINEERS (T.A.) has a vacancy for a **JUNIOR T.A. OFFICER** with qualifications and engineering or engineer plant. Applications with or without previous service considered. Apply, with full details, to Adjutant, T.A. Centre, Gordon House, Sutton Road, Walsall, Walsall 5844.

CONSTRUCTION WORK IN TURKEY

Vacancies on single status exist for:
(1) CONSTRUCTION EQUIPMENT
GENERAL FOREMAN

Capable of controlling, allocating and maintaining a large fleet of American makes of constructional equipment, including heavy mobile cranes, tractors, compressors, welding sets, concrete plant, etc. Only applicants having held similar responsible positions need apply. Job situated on Mediterranean coast. Sterling salary. Accommodation and messing provided with local currency, living allowance and kit allowance. Duration of contract 18 to 24 months.

(2) MALE CONFIDENTIAL SECRETARY STENOGRAPHER and PERSONAL ASSISTANT to MANAGER

With knowledge of written and spoken Turkish and French languages. Conditions as above.

Written applications only, stating age and full details, to:

Oil Construction Manager,
FOSTER WHEELER, LTD.,
3 Ixworth Place, London, S.W.3.

TAYLOR WOODROW CONSTRUCTION, LTD., REQUIRES an experienced and reliable ASSISTANT in the Camp Welfare Office on the Hinkley Point Atomic Power Station Contract, near Bridgwater, Somerset. This is a staff appointment. Camp accommodation available. —Write to the Agent.

AGENT REQUIRED for medium-sized building contract in Lancashire area. Good prospects for first-class man. —Reply, stating age, experience and salary required, to M. J. GLEESON (CONTRACTORS), LTD., C.E. Dept., Haredon House, London Road, Cheshunt, Essex, Surrey.

ARTHUR KENYON, TAUTE AND PARTNERS REQUIRE competent CLERK OF WORKS to supervise science block extension to Wilson's Grammar School, Camberwell, commencing April. Good experience essential. Salary up to £20 a week, depending on ability. —Apply in writing, with full particulars and references, to 140 Park Lane, London, W.1.

BRITISH ROAD TAR ASSOCIATION

APPOINTMENT OF FULL-TIME DIRECTOR. The Association invites applications for the above appointment, which is to be made in the near future. The director must be capable of maintaining high-level liaison with Government departments and other interested bodies, and of representing the Association and controlling the activities of the Association. Experience in road work and in dealing with Government departments is essential, and a civil engineering qualification is desirable. Age between 45 and 55. Salary to be settled by negotiation. The B.R.T.A. is an organisation concerned with research, development, road experiments, technical service and propaganda on the use of tar for the construction and maintenance of roads and airfields. Its membership comprises the nationalised Gas Industry, the National Coal Board, and private enterprise as represented by coke oven firms and tar distillers. —Closing date, MARCH 30th. Inquiries and applications to:

The Chairman,
BRITISH ROAD TAR ASSOCIATION,
9 Harley Street, London, W.1.

PRECAST CONCRETE: ASSISTANT MANAGER, about 30 years of age, REQUIRED for organising production at our Trusham Works. Development experience essential in the manufacture of general precast products, reconstructed stone and heavy R.C. units. A contributory pension scheme is available. —Applications to General Manager, TEIGN VALLEY CONCRETE CO., LTD., Trusham, Newton Abbot, Devon.

SITE ENGINEERS and GENERAL FOREMEN. Experienced in roads, sewers and reinforced concrete REQUIRED for Gloucester and Oxford areas. Permanent appointments with an expanding company. Good prospects for advancement. —Write, in first instance, full particulars including salary required, in confidence, to WILLIAM T. NICHOLLS, LTD., St. Pauls Road, Gloucester.

ASSISTANT CIVIL ENGINEER REQUIRED for site work on Hamersmith Flyover contract. —Apply, stating qualifications and experience, to MARPLES, RIDGWAY AND PARTNERS, LTD., 2 Lygon Place, Victoria, S.W.1.

RUSH AND TOMPKINS, LTD.

REQUIRE due to expansion:
ESTIMATORS
CONTRACT MANAGERS and AGENTS
SURVEYS and ASSISTANT SURVEYS
GENERAL FOREMEN

Apply, in writing, with details of previous experience. All replies will be treated in strict confidence.

Dept. 3,
RUSH AND TOMPKINS, LTD.,
26 Victoria Street, S.W.1.

ELECTRICAL INSTALLATION SUPERINTENDENT REQUIRED for the installation of electrical services on an oil-loading jetty in the Middle East. Must be capable of working from drawings and specifications and must have a practical experience of this type of work, including plant and power. —All found. Short contract. —Write, call or phone, RAYMOND INTERNATIONAL, 93 Shaftesbury Avenue, London, W.1. REGENT 7536.

SITE AGENTS REQUIRED for school and telephone exchange building contracts North Wales and Cheshire. Applicants please do not reply unless capable of high-class economic work. Advancement to contracts manager in due course. Pension scheme. State age, salary required, and send fullest details of experience, to Box V.1229, "The Contract Journal."

JUNIOR SURVEYOR REQUIRED, based on contractors' office, Essex area, with site measuring experience. Good prospects. Pension scheme. —Full details to Box V.1220, "The Contract Journal."

APPOINTMENTS VACANT

CLERK OF WORKS REQUIRED on building projects, London area, Midlands and Scotland. Experience of reinforced concrete essential.—Write, giving particulars of experience and salary required, to Box V.1231, "The Contract Journal."

CHARTERED CIVIL ENGINEER REQUIRED as MANAGER of expanding department in a contracting company with international interests. Previous experience in office administration and estimating for, and supervision of, civil engineering contracts essential. This is an opportunity for a well-trained man, preferably a university graduate, to build up a worthwhile permanent career in an established company based in the provinces, with possibilities of directorship in due course. A substantial salary, bonus on results, and other inducements will be offered, along with a company house at moderate rental, and removal expenses. Candidates for this post are invited to apply in own handwriting (confidence) for further particulars, also submitting a précis of their education, experience, availability, marital status and salary requirement, pending possible further inquiry from the interview with the advertisers.—Write Box V.1232, "The Contract Journal."

SITE ENGINEERS REQUIRED for long contract in the Colchester area.—Apply General Manager, FARRANS, LTD., 39 Upper Brook Street, London, W.1. Tel.: GROsvenor 4986.

CARPENTERS and CARPENTER CHARGEHAND REQUIRED for shuttering. Good hours, bonus, subsistence.—Apply JOHN HOWARD AND CO., LTD., Tittesworth Reservoir, Leek, Staffs. Telephone Blackshaw 312.

LIVE PLANT SALES REPRESENTATIVE REQUIRED for South Coast company, preferably man who has experience in smaller earthmoving equipment, hydraulic excavators, shovels, etc.—Write, giving details of past experience, two references and salary required, Box V.1227, "The Contract Journal."

A. MONK AND CO., LTD., Warrington, Lancs., REQUIRE SITE ENGINEERS for major projects in and around the north-western, north-eastern and south-west Midland areas. Permanent and progressive posts. Superannuation scheme in operation.—Applications, in confidence, stating age, full details of experience, and qualifications, etc., please reply to Mr. H. Hudson, Personnel Department, A. MONK AND CO., LTD., Padgate, Warrington, Lancs.

ESSO PETROLEUM CO., LTD., have a vacancy for a BITUMEN SALES REPRESENTATIVE aged 25 to 30 years. Applicants should have a good standard of education and a knowledge of bituminous road construction. Additional engineering experience would be an advantage. Good salary and pension scheme. Applications should apply in writing, giving details of age, qualifications, experience and salary required, to the Employees Relations Manager, Esso Petroleum Co., LTD., Esso Hall, Little Aston, Sutton Coldfield, Warwickshire.

DOZER DRIVER, Southern England. Medium and small machines. Must be fully experienced in all branches.—Write details of past experience, recent references and salary required, to Box V.1228, "The Contract Journal."

JUNIOR BUILDING SURVEYOR REQUIRED for expanding builders' office in Watford, to assist at estimating, accounts, etc.—Apply, in writing, stating age and giving details of experience and salary required, to Box V.1230, "The Contract Journal."

SENIOR ESTIMATOR REQUIRED for tendering on building engineering work of all types. Previous experience essential. Bonus and pension schemes. Fine prospects. Permanent position.—Apply: ROBERT McGREGORS AND SONS, LTD., Midlands Office, Turnpike Lane, Chesterfield.

REQUIRED for building and civil engineering contractors, Essex: ENGINEER/SURVEYOR with wide experience to enable him to preplan and programme contracts in all aspects. Good opportunity for right man. Pension scheme operating.—Full details to Box V.1221, "The Contract Journal."

SURVEYOR REQUIRED for building and civil engineering contractors, S.E. Essex, to measure for interim valuations, agree sub-contractors and settle final accounts. Must be fully experienced. Pension scheme.—Full details and approx. salary required to Box V.1219, "The Contract Journal."

For Advertisements received too late for classification see page 845

APPOINTMENTS WANTED

CIVIL ENGINEER, age 33, wishing to settle, SEEKS POSITION with county contractor.—Write Box W.1250, "The Contract Journal."

BUILDING AND CIVIL ENGINEERING PLANT AND TRANSPORT MANAGER, experienced in control of mechanical plant, supervision of site servicing, operators, workshop repairs and stores. SEEKS POSITION of RESPONSIBILITY. Keen costs man. Resident in S.W. London area.—Write Box W.1239, "The Contract Journal."

FOREMAN/AGENT, roads, sewers, etc., use level. London or Greater. Accustomed sole control.—Write Box W.1161, "The Contract Journal."

Agent, recently engaged in main drainage and roadworks, sewers, etc., mobile, own transport. SEEKS NEW POST. Experienced in estimating, measurement, final accounts, setting out, etc.—Write Box W.1267, "The Contract Journal."

ENGINEER comprehensive experience of contractors' plant (C.E. Plant Manager), all equipment, for unusual contracts—quay walls, heavy machinery, surveying, steel erection, etc., etc. SEEKS RESPONSIBLE POST. Age 36. Public school, and well worth an interview at top level. First-class references.—Write Box W.1260, "The Contract Journal."

WORK REQUIRED

MOTOR BOAT OWNERS REQUIRE CONSTRUCTIONAL WORK, ATTENDANCE, PERSONNEL, GOODS, TOWAGE, etc. Craft and labour supplied.—Apply: THOMAS BROS., 62 Sussex Road, East Ham, London, E.6. Telephone: GRA. 6697/3151.

SITE CLEARANCE, BULK EXCAVATION. JAMES AND CO., LTD., Trading Estate, Slough. Telephone: Slough 20361—Ext. 4.

SAM BOOTH, LTD., Perry Mount Chambers, Haywards Heath, Sussex. Tel.: Haywards Heath 1126 and 1258. SUB-CONTRACT or HIRE: D9s, with Bulldozer and Caterpillar 463 Scrapers.

UPROOTING—TREES, STUMPS, HEDGES, etc. We have the most experience and all modern equipment.—T. GRAVESON, LTD., Warton, Carnforth, Lancs. Tel.: Carnforth 381 and 382.

WORK REQUIRED

EARTHMOVING, EXCAVATION, CONTRACT or HIRE. Bulldozers, Scrapers, Traxcavators, Trenchers, etc.—Phone: Chiswick 8511/2. Midstone 7284 S.6. TRACTORS HIRE (CHISWICK), LTD., 300 Chiswick High Road, W.4.

EXCAVATION SUB-CONTRACTS. Technical staff available to analyse, programme and price complex projects. Particular attention given to finish and compaction. D9, D8, TD18 and TD14 Scrapers, Excavators, Loading Shovels and Lorries available to undertake immediate supervision for execution of work.—DICK HAMPTON LTD., Blacknest, Alton, Hants. Tel.: Bentley 2241.

SITE CLEARANCE AND BULK EARTHMOVING with latest machines. Playing Fields Construction and all allied works.—For your contracts in the Southern Counties, consult: G. S. DANIELS, 387 Winchester Rd., Southampton. Southampton 68956.

GENERAL SITE CLEARANCE with specialised equipment. Awkward trees and roots removed. Explosives experts available. Also Seeding, Turfing and all other branches of landscape gardening undertaken by: KINGSWAY NURSERIES, LTD., of Ewell, Surrey. Telephone: Ewell 1726.

SPECIALISED EXPLOSIVES SERVICES.—U.K. and OVERSEAS MOBILE UNITS coverage on ex-service strong points, sea walls and dangerous structures, etc.—124 Old Shoreham Road, Shoreham, Sussex. Tel.: Southwick 3791 or Shoreham 4193.

SUB-CONTRACTS WANTED. Labour only. Foundations, concreting, drainage, earthworks, mains, G.P.O., road pitching, etc.—FOLAN AND HARRIS, 27 Richmond Mount, Headingley, 7. Tel.: Leeds 58316.

FOR HIRE IN MIDLANDS, new Blaw Knox P90 PAVING MACHINES, complete with experienced operators (and gang) if required. Sub-contract work or price per ton for material laid (Macadam, Asphalt, Wetmix, Reinforced Concrete, etc.).—For full details, apply: BRIDGE ROAD CONSTRUCTIONS, LTD., 14/26 Henleaze Street, Bristol. Coventry 88473.

BULK EARTHMOVING, direct contract or sub-contract. Also BULLDOZERS and SCRAPERS for HIRE.—FRANK R. WALPOLE, LTD., 126 Wing Road, Leighton Buzzard, Beds. Leighton Buzzard 3351.

FOR HIRE OR SUB-CONTRACTS. TD18s and BTD6 BULLDOZERS and SCRAPERS. BTD6 and TIMBER WINCH. Caterpillar TRAXCAVATOR, 1½ cu. yd. Bucket. Competitive rates. Experienced operators. Go anywhere.—COTSWOLD HAULAGE, Tanfield House, East Street, Farnham, Surrey. Tel.: Farnham 4049 day and night.

IF GRADING, SEEDING, TURFING AND PLANTING form part of your CONTRACT, we will be pleased to quote you to—HOLDRUP, 139 Bills Hill, Barnet. Telephone 911.

WANTED: HIRE OR CONTRACT WORK for modern roads of DW218, 299, and D8s. Apply: BRODRICK AND RYAN, LTD., 221 Nottingham Road, Ilkeston, Derby. Tel.: Ilkeston 4381/2.

IF TREES, ROOTS or UNDERGROWTH feature in your contract, we would be pleased to quote for their ECONOMIC DISPOSAL SERVICES.—BAGSHOT SAWMILLS, LTD., 32 London Road, Camberley, Surrey. Telephone 14.

ALLEN OXFORD GRADERS for HIRE. GRASSHALTE, LTD., Hampton Hill, Middlesex. Telephone: Molesey 4343.

BULK EXCAVATIONS, any quantity quoted for. Own plant and lorries.

COFF AND SON (EXCAVATIONS), LTD., Buckhurst Hill, Chipping, Ascot, Berks. Ascot 1026/7/8.

WANTED: EXCAVATION, SITE CLEARANCE and DEMOLITION WORK. R. BARKER (PECKHAM), LTD., New Cross 3337.

BULK EXCAVATIONS and SITE WORKS undertaken. DIRECT or on SUB-CONTRACT basis. Quotations given for large or small contracts anywhere.—S. AND L. BULL BROS., LTD., 1264 High Street, Winchester. Winch 2264.

ERCTION and DISMANTLING. Structural Steel, work and all types of prefabricated components. Speedy and efficient service.—ERECTOR, 80 Bulwell Crescent, Cheshunt, Herts. Waltham Cross 22564.

BLASTING BY EXPERTS on any project in the United Kingdom.—Consult CLARKE DEMOLITION AND CONSTRUCTION CO., LTD., Waldringfield, Ipswich, Suffolk. Telephone: Waldringfield 663.

SOILING, SEEDING and TURFING. Site Clearance, Excavation and Levelling Work undertaken in any part of the U.K. at competitive prices.—GILLIAM, Purley, Surrey. Uplands 9222/6.

BULK EARTHMOVING, OVERBURDEN STRIPPING, EXCAVATIONS for roads, airfields, etc., with large fleet of Caterpillars, etc., and D1 Tractors. Keen prices for work anywhere in the country.—CONTRACTORS' PLANT HIRING CO., LTD., Barkby Road, Leicester. Tel.: Leicester 66631 (4 lines). NORTHERN REPRESENTATIVE: 91 Shaw Road South, Shaw Heath, Stockport. Telephone: STOCKport 3082.

EARTHMOVING in south-west carried out by modern fleet of machines—hire or contract. Traxcavators, motor scrapers, bulldozers, excavators and mobile cranes.—GRANGE PLANT, LTD., Honiton, Devon. Telephone: Broadhembury 330-355.

SITE CLEARANCE, EXCAVATION. MOBILE HAULAGE, LTD., 230 Tottenham Court Rd., London, W.1. Tel.: 7833-5.

TARMACADAM and TARSPRAYING by specialists. Private Drives, Roads, Forecourts, Car Parks, etc. Resurfaced or Reconstructed.—STANLEY LUCAS (SLOUGH), LTD., Slough 21279.

DIRECTORSHIP

ADVERTISER, with capital wishes to MEET experienced man with a view to forming a company. Preference will be given to the man having sound contacts with cable contractors and electrical authorities. DIRECTORSHIP with salary of £2,000 per annum, plus share of profits. This is a genuine offer for right type of man. All correspondence treated with strict confidence.

Write Box X.1185, "The Contract Journal."

DIVING

DIVERS IMMEDIATELY AVAILABLE. Welding, cutting, construction, etc. Any part of world. UNDER WATER WELDERS AND REPAIRERS, LTD., Cardiff. Tel.: 29631. (After hours: Penarth 58131.)

DIVING WORK REQUIRED, all classes, competent divers. A. J. PARSOLOE, Diving Contractor, 14 Haig Avenue, Brighton, 6. Telephone 61228.

SUPPLEMENT

841

AGENCIES

Agent, based on Birmingham, existing connections with large industrial groups, architects and corporations, offers manufacturers an ACCOMMODATION ADDRESS. Sales representation on commission only basis if desired.

Write Box X.1183, "The Contract Journal."

PARTNERSHIPS

ENERGETIC WORKING PERSON with capital offered HALF INTEREST in civil engineering concern, Manchester area, £3,000.

Write Box X.1152, "The Contract Journal."

BUSINESSES—SALE OR WANTED

BUILDING AND CIVIL ENGINEERING CONTRACTORS, privately owned, situated north side of Birmingham. Three years' contracts in hand amounting to £250,000 plus. Excellent staff. Principals only, please, £50,000.

Write Box X.1206, "The Contract Journal."

MANAGERSHIP with civil engineering contractors in order to undertake construction schemes, reservoirs, dams, etc. Large fleet of first-class earthmoving plant, mostly large tractors, or would SELL OUTRIGHT with present contracts.

Write Box X.1236, "The Contract Journal."

Plant HIRE, CIVIL ENGINEERING or BUILDING COMPANY REQUIRED with substantial tax losses. Write Box X.1233, "The Contract Journal."

An expanding company wish to PURCHASE a small PLANT HIRE FIRM operating tractors, excavators, etc., in the Midlands.—Inquiries in the first instance should be addressed to GEORGE AND GORDON, 123 Victoria Street, Westminster, London, S.W.1.

WANTED: PLANT HIRE BUSINESS, including reasonable-sized depot. Birmingham-Coventry area.—Full particulars, in confidence, to Box X.1268, "The Contract Journal."

PROFESSIONAL SERVICES

CIVIL ENGINEERING SERVICES available on fee basis. Contractors not desirous of maintaining permanent engineering staff, fitting out, surveys, preparation of monthly certificates, final accounts, claims, estimates, etc. Own transport. Write Box X.9962, "The Contract Journal," or phone ADDiscombe 3712.

CIVIL ENGINEERING CLAIMS.—Director/Consultant Engineer, with long and varied experience in high-level negotiation of contractors' claims. OFFERS SERVICES on a fee/commission basis. Write Box X.1058, "The Contract Journal."

CARR'S QUIPS—ESTIMATES. If your staff are doing all they are able—it's no use leaving another job on the table—Send it to R. J. CARR, Britain's top freelance estimator, 42 Combe Road, New Malden, Surrey. Tel.: Malden 8640.

HORTICULTURAL

TOP SOIL, 200,000 cubic yards available, delivered in large and small quantities. Soil supplied ex site in approved cases.—LATHAM AND CO. (CONTRACTORS), LTD., Westward House, Guildford Rd., Lightwater, Surrey. Bagshot 2037 and 2400.

AKEEN QUOTATION for your TURFING and HEDGING CONTRACTS: London and Home Counties.—R. J. ENSTONE & SON, LTD., Head Office: 34 Alma Rd., St. Albans. (St. Albans 5528.)

TURFING—SEEDING—HEDGING. Quotations for all branches of landscape work, anywhere in the U.K. C.E. contractors a specialty.—WEBSTER BROS., Horsforth, Leeds. Horsforth 2364.

BUY THE GENUINE CHILTERN TURF. Instructions for laying supplied free. Guaranteed satisfactory results. Turves 3ft. x 1ft., precision machine, well treated, close mown, £3 per 100 delivered. Let us quote you for levelling and laying with guaranteed Chiltern Turf or Grass Seed. Building estates laid-out for contractors. Orders taken weekly 9.5—CHILTERN CONTRACTORS, Cryers Hill, High Wycombe, Bucks. Tel.: Holmer Green 3127.

TURVES—Machine-cut 3ft. x 1ft., close mown, weed-treated, 60/- per 100. Keen trade rates. We would be pleased to quote for your levelling and laying.—E. R. RANCE, LTD., 24 Sheepcot Lane, Watford. Telephone: Garston 2725.

MASSEY-FERGUSON 65 TRACTORS for HIRE, also comprehensive range of ATTACHMENTS, including Tipping Trailers, Lorry-mounted excavators, and all Land and Building Implements. Turf-cutting Machines, etc. C.E. contractors catered for.—RINGWAY CONTRACTORS, LTD., Horsforth, near Leeds. Telephone: Horsforth 4805.

QUICKTHORN HEDGING PLANTS. Strong, bushy, transplanted, 240/- per 1,000, 18in.-24in. high, less 10/- per 1,000 for 10,000 lots. Carriage paid for C.W.O.—BLAKEDOWN NURSERIES, LTD., Blakedown, Kidderminster.

CHESHIRE TURF for SALE, ex existing playing field, close mown, machine-cut, ready to lay, some suitable for cricket squares, etc., 2/-—3/- sq. yd., delivered 10 miles. Reduction for quantities.—FLOODS, Mancot, Queensberry, near Chester. Tel.: Hawarden 2300.

YOUR THORNY PROBLEMS SOLVED. We can offer QUICKTHORN at very competitive prices. Let us quote you.—ALFRED J. COX (GARDENS), LTD., Stoke Poges, Slough.

QUICKS, EXTRA QUALITY fibrous rooted: 12-18in., 18-24in., 145/-, 18-24in., 24/-, 200/-, 24-30in., 28/-, 270/-, extra heavy, 30-40in., 35/-, 330/-, special transplanted and cut back: 18-24in., 35/-, 330/-, 24-36in., 40/-, 380/-, OVAL LEAF PRIVET: 12-18in., 22/-, 215/-, 18-24in., 28/-, 275/-, special transplanted bushy: 18-24in., 35/-, 36/-, 34-36in., 50/-, 470/-, 30-36in., 70/-, 670/-, BEECH: 10-16in., 20/- per 100, transplanted 3-year: 18-24in., 50/-, 480/-, 30-36in., 75/-, 700/-, LONICERA NITIDA: transplanted: 18-24in., 45/-, 420/-, 24-30in., 50/-, 450/-, All above prices per 100 and 1,000. CUPRESSUS LUSITANIANA: 12-24in., 130/- per 100, transplanted: 12-18in., 100/- per 100, 18-24in., 24/- per doz. All carriage paid for cash with order.—GARDEN BEAUTY PLANTS, Wickford, Essex. Telephone: 2152.

ROTARY CULTIVATORS available for HIRE or CONTRACT WORK. Grading, Leveling, Earthmoving undertaken.—JAMES COOPER, LTD., 28 Kensington Church Street, London, W.8. Western 3412.



CONCRETING in cold weather

Avoid delays during the winter by using
'417' CEMENT. Please write for a copy of the booklet
 'Concreting in cold weather' which gives full details of

'417' cement
 QUICK SETTING AND EXTRA-RAPID HARDENING

THE CEMENT MARKETING COMPANY LIMITED
 PORTLAND HOUSE, TOTHILL STREET, LONDON, S.W.1.
 G. & T. EARLE LIMITED, HULL
 THE SOUTH WALES PORTLAND CEMENT
 & LIME COMPANY LIMITED, PENARTH, GLAM.



A COMPLETE RANGE

Concrete Buckets

FOR EVERY APPLICATION

Of advanced design Blaw Knox Concrete Buckets ensure high operating efficiency. They are robustly constructed enabling them to stand up to the most arduous operating conditions.

CLAMSHELL GATE

for general building construction

ROLLER GATE

for low slump concrete

COMPRESSED AIR CLAMSHELL

for mass concrete work

HYDRAULIC

for mass concrete work

UNDERWATER

for work on jetties, piers, etc.



Large discharge opening
permits rapid, clean but
easily controlled discharge of
concrete.



KENSINGTON 5151
BK581

For full details write for Publication 296

BLAW KNOX LIMITED BOX 146, 90/94 BROMPTON ROAD, S.W.3.

INDEX TO ADVERTISERS

	Page		Page		Page
A					
A.B.C.D. (Raynes Park), Ltd.	814	Ford Motor Co., Ltd.	885	P	
Abelson & Co. (Engineers), Ltd.	824	Foster, Arthur, (Construction Engineers), Ltd.	814	Pegson, Ltd.	788
Abelson & Co. (London), Ltd.	814	Frodingham Cement Co.	821	Permanite, Ltd.	794
Allam, E. P. & Co. Ltd.	786, xii	G		Petters, Ltd.	859
Allen, Alfred, & Son, Ltd.	802	Garringtons, Ltd.	903	Phoenix Engineering Co., Ltd.	916
Allen, John, & Sons (Oxford), Ltd.	825, 878	Gazeway, Ltd.	801	Phoenix Shovel Co., Ltd.	820
Anderson-Grice Co., Ltd.	915	General Roadway, Ltd.	872	Photostat, Ltd.	822
Anderson & Arup, Ltd.	814	Gibson, Arthur L. & Co., Ltd.	914	Pike, George, Ltd.	883
Ashton-Young Engineering Development Co., Ltd.	xii	G.M. Power Plant Co., Ltd.	884	Pilot Works, Ltd.	784
Audax	814	Greenham Equipments, Ltd.	888	Plywood Manufacturers Association of British Columbia	902
B		Greenham Group	816	R	
Bamford, J. C. (Excavators), Ltd.	iiia, iv, vii	Grullik, Ltd.	794	Ransomes & Rapier, Ltd.	799
Barnards (Norwich), Ltd.	824	H		Rayton, J. W., (Engineers), Ltd.	794
Batley, Ernest, Ltd.	799	Helicopter Services, Ltd.	786	Road Machines (Drayton), Ltd.	816, 817
Benford, Ltd.	791	Hill, Richard, Ltd.	905	Rover, Refractories, Ltd.	843
Berford, James, & Son, Ltd.	890	Holman Bros., Ltd.	884	Ruston-Bucyrus, Ltd.	826
Bewen, James, & Son, Ltd.	844	I		Ryland Bros., Ltd.	830
Branch, Jack (London), Ltd.	xii	International Harvester Co. of Great Britain, Ltd.	iv, v	S	
Bray Construction Equipment, Ltd.	818	J		Saville (Tractors), Ltd.	Cover I
Breedon, Wilmot, Ltd.	xii	Johnson, C. H., (Machinery), Ltd.	819	Saxton & Co. (London), Ltd.	911
Bristol Plant Hire, Ltd.	798	Jones, William, Ltd.	901, 814	Sawmills Lorries, Ltd.	843
British Building & Engineering Appliances, Ltd.	796	Joy-Sullivan, Ltd.	vib, viii	Search, William G., Ltd.	818
British Cement Co., Ltd.	910	K		Selwood, W. R., Ltd.	886
British Paints, Ltd.	916	Kebrib Plant, Ltd.	823	Sharp Jones & Co., Ltd.	879
British Steel Piling Co., Ltd.	794	Kirkby & Sons (Sales), Ltd.	818	Shell-Mex and B.P., Ltd.	viii
British Vacu-Lug, Ltd.	814	Kitching Alf.	914	Sims, James, Equipment Co., Ltd.	818
Broom & Wade, Ltd.	815	L		Simms, W. J., Sons & Cooke, Ltd.	766
Buckton, Ltd.	815	Lafarge Aluminous Cement Co., Ltd.	821	Small & Parkes, Ltd.	912
Burn Bros. (London), Ltd.	908	Leach, Hubert C., Ltd.	804	Smith, Thos., & Sons (Rodley), Ltd.	913
C		Leverton, H., & Co., Ltd.	Cover vii	Stack Protection, Ltd.	904
C & A. Plant Services, Ltd.	814	Liner Concrete Machinery Co., Ltd.	789, 908	Stevens, J. F., Co., Ltd.	911
Caldwells, Ltd.	796	M		Survey & General Instrument Co., Ltd.	911
Cartruk, Ltd.	786, 802	Mackay Industrial Equipment, Ltd.	795	Symes (Plant Sales), Ltd.	804
Castle Moulded Products Co., Ltd.	814	Marley Concrete, Ltd.	881	T	
Chain Line Fencing Co., Ltd.	823	Marshalls Organisation	vi	Tarmac Roadstone, Ltd.	
Chamberlain Plant, Ltd.	9, 6	Mercantile Credit Co., Ltd.	892	Thorn, J. & Sons, Ltd.	788
Clifton, I., & Sons, Ltd.	xii	Miller Engineering Co., Ltd.	892	Thwaites Engineering Co., Ltd.	iii
Cohen, George, Sons & Co., Ltd.	813, 887	Michigan (Great Britain), Ltd.	890	Timeg, Ltd.	802
Cole, E. R., Ltd.	904	Mills Scaffold Co., Ltd.	890	Tirfor, Ltd.	906
Comet Engineering, Ltd.	817	Minnesota Mining & Manufacturing Co., Ltd.	Cover vi	Trist, Hubert H. P., & Co., Ltd.	788
Consolidated Pneumatic Tool Co., Ltd.	846	Mobile Haulage Co., Ltd.	912	U	
Construction Machinery, Ltd.	891	Moore's Plant, Ltd.	814	Under Water Welders & Repairers, Ltd.	888
Contractors Services, Ltd.	Cover iv	Myers, Fred, Ltd.	ivc, v	Universal Divers, Ltd.	914
Cowley, Martin, Ltd.	878	N		V	
Cox, H., & Sons (Plant Hire), Ltd.	902	Northide, Ltd.	910	Val de Travers Asphalt Paving Co., Ltd.	
Cripps, R., & Co., Ltd.	803, viii	Norwest Construction Co., Ltd.	886	Victor Products (Wallsend), Ltd.	790
D		O		Vigzol Oil Co., Ltd.	viii
Davies, O. L., Ltd.	Cover v	Oilding, Jack, & Co., Ltd.	Cover vii	W	
Davies, Alan, Ltd.	890	P		Ward, Thos. W., Ltd.	787, 797
Dawson, W. A., Ltd.	904	Parker, Frederick, Ltd.	785	Walters, G. L., Ltd.	907
Dav, C. E. M., Ltd.	920	Panel-Lastic (Construction) Co., Ltd.	818	Whitlock Bros, Ltd.	Cover ii and iii
Derbyshire Tractor Service	886	Peel, H., Ltd.	804	Wilmot Plant Hire Co., Ltd.	818
Diving Services, Ltd.	878			Winget, Ltd.	ii, iii
Doe, Ernest, & Sons, Ltd.	870			Y	
Dorman Long (Steel), Ltd.	803, viii			Youngman, W. C., Ltd.	vb
E					
Eddison Plant, Ltd.	viiiib				
English Electric Co., Ltd.	viii, xii				
Ensign Tools, Ltd.	viii				
Euclid (Great Britain), Ltd.	viii				
Evode, Ltd.	800, 801				

Advertisements received too late for Classification

EDINBURGH CORPORATION. FILTER SAND WASHING AND DEWATERING PLANT.

TENDERS are invited for the SUPPLY of a SAND WASHING AND DEWATERING PLANT capable of handling 20 tons of filter sand per hour. Copies of the Specification may be obtained from the City Water Engineers, 6 Cockburn Street, Edinburgh 1. Tenders must be lodged in a sealed envelope, endorsed "Filter Sand Washing and Dewatering Plant," with the TOWN CLERK, not later than 10 a.m. on MONDAY, 21st March, 1960.

The Corporation shall not be bound to accept the lowest or any Tender.

HEANOR URBAN DISTRICT COUNCIL. ROAD MATERIALS.

TENDERS are invited for the SUPPLY of the FOLLOWING for the 12 months ending 31st March, 1961:

Tarred and Bituminous Limestone.
Tarred and Bituminous Granite.
Concrete Kerbs.
Cold Asphalt.
Precoated Chippings (Granite, Limestone, Gravel and Slag).
Sand and Cement.
Forming Materials will be supplied on application to H. H. GARSIDE, Esq., M.I.M.E., Council Offices, Heanor, Derbyshire, and should be returned to the undersigned not later than SATURDAY, the 12th March, 1960, in a plain sealed envelope, endorsed "Tender for Road Materials."

PAUL M. ROBINSON,
Clerk to the Council.

Council Offices,

Heanor,

Derbyshire.

12th February, 1960.

ESHER URBAN DISTRICT COUNCIL. TENDERS FOR THE SUPPLY OF TRACTORS AND GRASS-CUTTING EQUIPMENT.

TENDERS are invited for the SUPPLY and DELIVERY of ALL OR ANY OF THE FOLLOWING ITEMS:

Two new Massey-Ferguson 35 De Luxe Diesel Industrial Tractors.

Two Sta-dri (or similar make) Cabs, complete with Electric Windscreen Wipers.

One Massey-Ferguson 3-ton Semi-mounted Tractor.

One Ransomes 30/11 Verge Cutter Motor Mower. The successful tenderer for the tractors will be required to take in part exchange a 1952 Ferguson Diesel Agricultural Tractor, which can be inspected by appointment at the Sewage Disposal Works, Farm Road, Esher.

Terms of Tender may be obtained from the Engineer and Surveyor, Council Offices, Esher. Tenders, on the prescribed form, enclosed in a sealed envelope, marked "Tender for Tractors, etc.," and bearing no mark or name indicating the sender, must be received by the undersigned not later than 5 p.m., 4th MARCH, 1960.

FREDERICK EDWARDS,
Clerk of the Council.

Council Offices,

Esher, Surrey.

12th February, 1960.

SALES ENGINEERS REQUIRED by BLAW KNOX, LTD., in their road and earthmoving divisions. Applicants must have experience of selling capital equipment at highest level, and the positions offer excellent scope and good prospects.—Write, quoting experience, age, etc., to Division Director (Sales), Blaw Knox, LTD., 90/94 Brompton Road, S.W.3.

CIVIL ENGINEER, under 30, University Graduate or A.M.I.C.E., REQUIRED in head office of long-established firm of Gunite specialists. Varied and interesting employment offering the diagnosis of the defects in structures, the preparation of remedial schemes and tendering for same, planning and administration of contracts. Applicants must have had some years' site experience with general contractors. Permanency and good prospects for a man with ability and drive, able to work on own initiative. Application scheme—Reply, in confidence, stating age, education, experience and present salary, to: C. WHITLEY MORAN M.I.C.E., 5 Old Hall Street, Liverpool, 3.

CIVIL ENGINEERS REQUIRED, age group 23-30 years, for sewage disposal works, roads and industrial contracts. Positions are progressive and experience varied. Applicants must have experience in setting out, measurements, good civil engineering background, and hold a driving licence.—Applications, in confidence, stating details, including age, experience and qualifications, to: INGRAM CONSTRUCTION LTD., 75 Hobbs' Malt Road, Solihull, Warwickshire.

GENTS REQUIRED for trunk road and sewerage contracts. Progressive situation with top remuneration for experienced men of proven ability.—COSTELLOE AND KEMPLE, LTD., Cheltenham.

QUANTITY SURVEYORS REQUIRED by associate company of national building and civil engineering contractors in Leeds. Permanent appointments with excellent opportunities for advancement; good salary and conditions and entry into superannuation scheme after 12 months' service. Applications, while being treated in the strictest confidence, to: ARTHUR WATERMAN, LTD., Moorland Works, Gelderd Road, Leeds, 12.

ESTIMATOR REQUIRED in our southern area office situated in Reading. The successful applicant will be fully conversant with all aspects of estimating both with regard to building and civil engineering contracts. Apply in writing, stating age, experience and salary required. Secretary, FITZPATRICK AND SON (CONTRACTORS), LTD., 455 Old Ford Road, London, E.3.

SENIOR AGENT, age 30-40, with experience of gas and water main laying. REQUIRED by medium-sized firm of public works contractors for contracts in London and Home Counties. Permanency for suitable applicant. Non-contributory pension scheme. State age, experience and salary required.

Write Box V.1243, "The Contract Journal."

A N experienced ENGINEER REQUIRED for contract in Gloucestershire. Must be capable of working on own initiative, and able to deal with interim accounts and claims.—Reply, giving full details of past experience and approximate salary requirement, to Box V.1251, "The Contract Journal."

GENERAL FOREMAN/SITE SUPERVISOR REQUIRED for civil engineering contracts in West Africa with an old-established British firm. Applicants should have experience overseas of working with local labour, and preference will be given to men with previous experience in West Africa. Permanent position with good conditions, 18-month tours. — Write, giving details of experience, etc., to Ref. EGS, Box V.1252, "The Contract Journal."

BOROUGH OF GRAVESEND.

TENDERS are invited for the SUPPLY and DELIVERY of (a) FORD THAMES 15CWT. TRUCK, and (b) 24in. DENNIS MOTOR MOWER, in part exchange for existing machines.

Specification and Form of Tender from Borough Engineer and Surveyor, 6 Woodville Terrace, Gravesend, on receipt of stamped addressed envelope. Tenders, on the form provided, to be delivered in a plain, sealed envelope endorsed "Truck" or "Mower," to the undersigned not later than WEDNESDAY, 9th March, 1960.

The Council does not bind itself to accept the lowest or any Tender.

F. W. HARRISON,
Woodville Terrace,
Gravesend,
February, 1960.

BOROUGH OF BARKING.

THAMES VIEW HOUSING ESTATE.

PILE FOUNDATIONS TO COMMUNITY HALL.

TENDERS are invited for the PROVISION and DRIVING of 31 PRECAST CONCRETE PILES OR PRECAST CONCRETE SHELL PILES WITH REINFORCED CONCRETE FOOTINGS FOR THE BEARING OF THE PROPOSED COMMUNITY HALL ON THE ABOVE ESTATE.

Tender documents can be obtained from the Borough Engineer and Surveyor, Town Hall, Barking, and should be returned to The Worshipful the Mayor, Town Hall, Barking, by 9 a.m. on MONDAY, 7th March, 1960.

E. R. FARR,
Town Clerk.

CITY OF HEREFORD.

CHANGING ACCOMMODATION— KING GEORGE'S PLAYING FIELDS.

TENDERS are invited for the ABOVE WORKS. Drawings and Specification may be obtained from the Office of the Engineer and Surveyor, on deposit of Two Guineas, refundable on receipt of a bona-fide Tender not subsequently withdrawn.

Tenders, in the envelope provided, and bearing no mark or indication of the sender, must be delivered to me not later than 9 a.m. on the 5th MARCH, 1960. The Council do not bind themselves to accept the lowest or any Tender.

T. B. FELTHAM,
Town Clerk.

WAREHAM AND PURBECK RURAL DISTRICT COUNCIL.

WOOL WATER SUPPLY AND SEWERAGE SCHEMES (SECOND STAGE).

CONTRACT NO. 31.

TENDERS are invited from experienced public works contractors for the FOLLOWING:

(a) The Provision and Laying of about 3 miles of 9in., 4in. and 3in. dia. Spun-Iron Water Mains and about 1/2 mile of Polythene Tube as House Connections.

(b) The Provision and Laying of about 4 miles of 9in. and 6in. dia. Concrete and Stoneware Sewers, Stoneware Laterals as required, 1/2 mile of 6in. dia. Spun-Iron Rising Main, and the Construction of Two Sewage Pumping Stations.

Together with other incidental works, all at Wool in the County of Dorset.

Contract documents may be obtained from the Engineer, ARTHUR G. FLINT, M.B.E., Chartered Engineer, West Street House, Wareham, on payment of a deposit of £10, which will be refunded on the receipt of a bona-fide Tender, not subsequently withdrawn. Drawings may be seen at the Office of the Engineer during usual office hours.

Tenders, in plain sealed envelopes, endorsed "Wool Water and Sewerage," must reach the undersigned not later than First Post on MONDAY, the 28th day of March, 1960.

The Council do not bind themselves to accept the lowest or any Tender.

C. F. J. DURANT-LEWIS,
Clerk of the Council.

Westport House,

Wareham,

Dorset.

15th February, 1960.

MEASURING SURVEYOR REQUIRED. Applications are invited for the post of Measuring Surveyor in connection with maintenance work at United Kingdom Atomic Energy Establishment, Windscale. Thorough knowledge of W.D. Surveying essential—Applications, in writing, stating age, experience and salary required. JAMES DREWITT AND SON, LTD., Ringwood Road, West Howe, Bournemouth.

SITE CLERK for road contracts in London area. Must be experienced. Wages, timekeeping, cost records and materials checking.—Write age, experience and salary required. Secretary, FITZPATRICK AND SON (CONTRACTORS), LTD., 455 Old Ford Road, London, E.3.

ESTIMATOR.—Applications are invited by civil engineering and building contractors for the position of ESTIMATOR in their head office. Applicants must have had previous site experience and preferably a number of years' experience in the preparation of tenders for heavy civil engineering and industrial building contracts. Includes reinforced concrete frame structures. The position is permanent, and carries a good salary, bonus, and conditions, and entry into the superannuation scheme will be arranged after 12 months' service.—Applications, giving full details of previous experience, will be treated in strict confidence, and should be addressed to THE MITCHELL CONSTRUCTION CO., LTD., Wharf Works, Peterborough.

TAYLOR WOODROW CONSTRUCTION, LTD., REQUIRE an experienced COST CLERK, accustomed to civil engineering works, on the Hinkley Point atomic power station contract, near Bridgwater, Somerset. This is a staff appointment. Camp accommodation available.—Write to the Agent.

CIVIL engineering contractors REQUIRE AGENTS and CIVIL ENGINEERS for Scottish contracts. Must be prepared to live away from home.—State age, experience and salary, to Box 0926, William Porteus and Co., Glasgow.

GENTS, SUB-AGENTS and SETTING-OUT ENGINEERS REQUIRED for civil engineering contracts in England and Wales.—Apply in writing, stating age, qualifications, experience and salary required, to Box V.1263, "The Contract Journal."

BUCKS. COUNTY COUNCIL.

PRIVATE STREET WORKS.

ALMOND ROAD, BURNHAM.

TENDERS are invited for the MAKING-UP of the ABOVE STREET. Specification, Form of Tender and Contract and Bill of Quantities may be obtained from the County Surveyor, County Offices, Aylesbury.

Applications must be accompanied by a return postage for £2, which will be refunded on receipt of a bona-fide Tender.

Sealed Tenders must be delivered to the undersigned by MONDAY, 7th March, 1960, in the envelope provided, endorsed "Private Street Works," but not bearing any name or mark indicating the sender.

The Council do not bind themselves to accept the lowest or any Tender.

R. E. MILLARD,
County Hall,
Aylesbury.

CITY OF CHESTER.

TENDERS.

PRIVATE STREET WORKS ACT, 1892.

TENDERS are invited for the MAKING-UP of DICKSONS DRIVE (Part only), approx. 90 lin. yds. and also for BROADWAY EAST (Part only), approx. 210 lin. yds. and BROADWAY WEST (Part only), approx. 210 lin. yds. The work comprises Carriageway Foundations (part), Surface and drainage, and the Making-up of the Footways and Verges.

Tender documents may be obtained from the City Engineer and Surveyor, 49 Northgate Street, Chester. Tenders, in separate sealed envelopes, endorsed accordingly, must be returned to reach the TOWN CLERK, Town Hall, Chester, not later than SATURDAY, the 5th March, 1960.

UPTON - UPON - SEVERN RURAL DISTRICT COUNCIL.

NEWLAND SEWERAGE AND POWICK SEWAGE DISPOSAL WORKS EXTENSIONS.

APPOINTMENT OF RESIDENT ENGINEER.

The Council invites APPLICATIONS from experienced persons for APPOINTMENT OF RESIDENT ENGINEER to supervise the construction of the above works under the direction of the Engineers, MESSRS. WILLCOX, RAIKES AND MARSHALL, Birmingham. The contract for the work is due to be completed in November, 1962.

Applications, giving full particulars of experience, age, stating salary required, together with the names of three engineers or previous employers to whom reference can be made, should be delivered to the undersigned on or before 12 Noon, SATURDAY, 5th March, 1960.

E. A. TURNER,
Clerk of the Council.

Council Offices,
Upton-upon-Severn,
Worcester.
15th February, 1960.

BOROUGH OF NELSON.

For SALE: Smith 2/10 EXCAVATOR, Serial No. 13980, complete with Skimmer, Backacter and Dragline equipment. Will dismantle and fit in good working order. Any inspection, £600 or nearest offer.

Apply BOROUGH ENGINEER'S OFFICE, Town Hall, Nelson.

ENGINEERS REQUIRED for trunk road and sewerage contracts. Progressive situations with top remuneration for experienced men of proven ability.—COSTELLOE AND KEMPLE, LTD., Cheltenham.

LISSYSE, EGAN AND PICKMERE, LTD., have VACANCIES for SUB-AGENTS and SETTING-OUT ENGINEERS on civil engineering contracts in England and Wales. Previous experience essential.—Apply to Head Office, 24 Calton Road, Edgware, Birmingham, 15, giving details of previous experience and stating age and salary required.

PLANT MANAGER REQUIRED to take charge of plant department of medium-sized firm of building and civil engineering contractors. Only personnel with previous experience in handling a plant department with appropriate administrative experience should apply. A man must be married and the position will not involve living away from home. The appointment will carry a four-figure salary and will be permanent after a probationary period, and the applicant will then be considered for superannuation benefits. Applications, giving full particulars, to W.M. EAVES AND CO., LTD., Vicarage Lane, Blackpool.

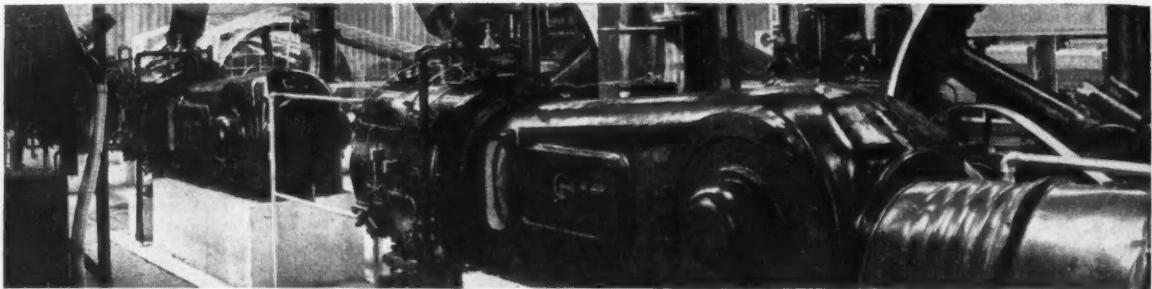
HENRY OSMAN AND CO., LTD., REQUIRE experienced SENIOR AGENTS, SUB-AGENTS, ENGINEERS, FOREMAN and GANGERS for civil engineering contracts in the South of England. Staff pension scheme.—Applications, stating age, qualifications, experience, salary required, to the General Manager, HENRY OSMAN AND CO., LTD., Winchester Road, Southampton.

QUANTITY SURVEYORS REQUIRED by major firm of building and civil engineering contractors with national or overseas experience in connection with excellent opportunities for advancement; good salary and conditions and entry into superannuation scheme after 12 months' service.—Applications, which will be treated in the strictest confidence, to THE MITCHELL CONSTRUCTION CO., LTD., Wharf Works, Peterborough.

SENIOR and JUNIOR ENGINEERS and MEASURING SURVEYORS are REQUIRED for building contracts in England. These are permanent appointments with good prospects. Bonus and superannuation schemes in operation.—Applications, which will be dealt with in strict confidence, must give details of age, experience, qualification, and salary required, and should be addressed to Personnel Officer, TARMAC CIVIL ENGINEERING, LTD., Ettingshall, Wolverhampton.

CIVIL ENGINEER, experienced in site work, concrete control, and preferably with some knowledge of concrete piles. REQUIRED by national firm of building and civil engineering contractors.—Applicants should have passed parts one and two of the I.C.E.—Write, giving full details, to Box V.1264, "The Contract Journal."

A FIRM of public works contractors, specialising in Post Office ductwork, REQUIRE a first-class TRAINEE-AGENT possessing drive, initiative and ambition. Applicant must be young and willing to lodge in any part of the country as required. State age, references, etc., in first instance, to Box V.1127, "The Contract Journal."



The main compressor house carries an installation of Consolidated Pneumatic Class "T" Stationary Compressors for low pressure air.

At Hinkley Point Atomic Power Station

CP equipment is working hard for Taylor Woodrow...



Difficult conditions for drilling, but all in a day's work to the Consolidated Pneumatic G-800 Tracdrill, shown drilling 4" holes in 40-ft. in hard shale and limestone to clear a channel for the floating caisson.

Wherever big construction projects are going on, CP air compressors and power tools will be found at work on the site. An example of this is to be seen at Hinkley Point Atomic Power Station being built for the Central Electricity Generating Board by The English Electric, Babcock & Wilcox, and Taylor Woodrow Atomic Power Construction Co. Ltd. The civil engineering contractors, Taylor Woodrow Construction Ltd. are using a big proportion of CP equipment for every type of duty, not only to save time and man-power but also to maintain their high standards. These pictures illustrate the complexity of operations being carried out at Hinkley Point. The excellent progress achieved by Taylor Woodrow reflects in some measure the efficiency of the CP equipment they have chosen for this work.



A CP pneumatic chain saw proves a great time-saver for the many timber construction jobs occurring on a big contract.



Removal of water is a frequent problem on contracting work. The rugged CP-77 Sludge Pump can be relied upon for continuous duty in the roughest conditions.



Consolidated Pneumatic

CONSOLIDATED PNEUMATIC TOOL CO LTD • DAWES ROAD • LONDON • S.W.6
CP/197

THE
CONTRACT JOURNAL
 INCORPORATING
 THE BRITISH CONSTRUCTIONAL ENGINEER AND THE CONTRACTOR

THE CONTRACT JOURNAL
 Incorporating
 THE BRITISH CONSTRUCTIONAL ENGINEER
 and
 THE CONTRACTOR
 Established 1879

No. 4,208 Vol. CLXXVI Feb. 18, 1960

Editor:
 LAWRENCE McCARTHY

PRINCIPAL CONTENTS

	PAGE
A Lawyer Considers: The Issue of Payment for Extras	848
Highway Engineers Discuss Recent Developments in Bridge Design ...	849
Contemporary Army Quarters	850
American and Canadian Houses in Ideal Home Exhibition "Village" ...	851
In Parliament: Rising Land Prices—Effect on Local Authority Housing	852
Post-war Progress in Building Techniques: Increasing Skill of Management	853
Nottinghamshire Road Maintenance Severely Curtailed: County Surveyor's Annual Report	854
Brewery Building Features Two Varieties of Shell Concrete Roof ...	855
Late Construction News	856
Hexagonal Theatre to be Built at Chichester	857
Men and Movements	858
Building Research Station Digest No. 131: External Rendered Finishes ...	859
International Construction	860
F.B.I. Inquiry into Industrial Trends ...	861
Talking of Safety, by "Dragee"	862
Fire Precautions in High Buildings: L.C.C. Committee's Report	862
Trade Section	863
CURRENT CONSTRUCTIONAL ACTIVITIES:	
Projects	867
Contracts	870
Awards	876

Publishers

The Contract Journal Co., Ltd.,
 32 Southwark Bridge Road, London, S.E.1.
 Telephone: Waterloo 3411 (7 lines).
 Telegrams: "Seejasir," Sedist, London.

Subscriptions

"The Contract Journal" can be supplied direct from the above offices. Subscriptions, payable in advance: Yearly, £5 4s. (post free); half-yearly, £2 12s. An order form appears on page 920.

Advertisements

Advertisement rates may be obtained on application to R. Binfield, Advertisement Manager.

BUILDING TECHNIQUES

AN effective retort to anyone who still cares to criticise the construction industry as inefficient was given by Mr. Ronald Wates recently in an address to the Chartered Auctioneers' and Estate Agents' Institute, a report of which appears elsewhere in this issue. He emphasised that the progress in building techniques in the last 15 years has been continuous and over a broad front. There were three main features of this progress: The increase in the skill of management; the closer interplay that is emerging between design and construction; and the "enormous improvement" that has been made in builders' plant.

In the past five years building materials and building labour have advanced in cost by something over 20 per cent. Despite this advance in the index, in actual fact the cost per foot super. of the flats we are building today is within a few pence of the cost five years ago. It can be said, therefore, that the influence of higher management skill and the better understanding of the interplay between construction and design have resulted in substantial cost reduction.

Mr. Wates' statement can be substantiated over a longer period and over the industry as a whole. In the case of local authority housing, for example, the cost per square foot of a three-bedroom house rose from 23s. 10d. in the fourth quarter of 1947 to 32s. 9d. in the fourth quarter of 1958, according to figures published by the Ministry of Housing and Local Government. This is a rise of 37 per cent. Over the same period basic building wages rates rose by 92 per cent. (from 2s. 6d. to 4s. 9d. an hour), and building materials prices by about 60 per cent.

Since 1947, output per man has improved by some 25 per cent. The operatives can of course justly claim some credit for this. But there is not the slightest doubt that the factors listed by Mr. Wates have made a vital contribution. Some months ago the European Productivity Agency commented that a revolution was taking place in the building industry that might well change its character and future as completely as the textile industries were changed in the eighteenth century. Mechanisation in the industry and the assimilation of new ideas has wrought a new scientific approach to building problems.

On a building site today the emphasis is on organisation for the elimination of wasteful labour and for speeding up the work. There has been a marked improvement in site planning and organisation. Work study, so long limited to factory production, is being applied to more and more building operations. Building owners, architects and contractors are now realising more fully that the general adoption of advance planning principles can reduce costs substantially. No industry or enterprise can be better than the skill and ability of those who control its affairs; the industry is making huge strides in improving its management practices and during the last few years has evolved clearly defined patterns of study and practical experience for its future managers and supervisors.

Mr. Wates has done a service to the industry in pointing to an improvement in its efficiency and in focussing attention on the important advances being made by contractors. Their task has not been easy; every year since the war the industry has been hampered in its efforts by being so closely tied to fluctuating national economic policies. But the headway it is making is now showing up in the facts and figures. The lesson for all is clear. Give the industry an opportunity to plan its future development in a stable atmosphere and the achievements so far will mark only the beginning of a persistent and even spectacular advance.

Cost of Running Estates

WITH the assistance of local authorities, Mr. Henry Brooke, Minister of Housing and Local Government, hopes to initiate within the next few months a full study of the management and maintenance costs of housing estates. As the scale of housing increases, the cost of running council housing estates becomes increasingly important nationally; it is necessary to recognise that management and maintenance costs are in the long run as important as capital costs.

This move by the Minister is to be welcomed. As he told the recent conference of the Society of Housing Managers, if a national system of costing could be devised, which would produce reliable comparisons for the various services which make up the costs of management and for the elements of maintenance on houses of different age and design, it would provide a most valuable index of efficiency and economy, benefiting both landlord and tenant.

A LAWYER CONSIDERS . . .

The Issue of Payment for Extras

IT has been disappointing to many in the industry that the revised R.I.B.A. Standard Form of Contract has been so long in appearing. We now know from the N.F.B.T.E.'s annual report that the delay is primarily due to a major clash between the contractors and the employer's representatives on the important issue of payment for extras.

It is hardly worth saying that any building contract which does not contain reasonable provisions on this subject is better unsigned and no contractor could possibly agree to a contract which allowed the architect's and the employer's inefficiency or inability to make a definite decision to be at the contractor's expense. After all if they eventually realise that unplanned work, badly billed and with inadequate drawings, results in jobs turning out more expensive than originally thought it might result in better pre-contract planning. There seems little doubt, therefore, that the contractors on principle are right in refusing to support any revision of the R.I.B.A. Contract which does not safeguard their position on what is a crucial issue for them—after all they face bankruptcy or compulsory liquidation if they enter into contracts which turn out unprofitable because of unfair contract conditions, whereas, this is certainly not the case with many employers like local authorities. But it is worth considering how much room there is for compromise on this issue and to discuss therefore the adequacy or otherwise of the present position as to payment or other contractual benefits for extras under the R.I.B.A. Standard Form.

Present Position

The R.I.B.A. Contract is a lump-sum contract under which the contractor's obligation is to "execute and complete the Works shown upon the said drawings and described by or referred to in the said Bills of Quantities and Conditions." Clause 1 then commences, "The Contractor shall carry out and complete the Works in accordance with this Contract in every respect in accordance with the directions and to the reasonable satisfaction of the Architect." Further on in Clause 1 the architect is given the right "in his absolute discretion and from time to time" to "issue further drawings, details and/or written instructions, written directions and written explanations" in regard to eight specified matters; these architect's instructions, etc. are specifically dignified with the title "Architect's Instructions."

Thus we may state that, provided the instructions are reasonably relevant to the sort of building contract entered into, the architect has unlimited power to issue instructions; and indeed there are throughout the contract some thirty or forty occasions on which the architect is empowered specifically to issue instructions either off his own bat or in response to requests by the contractor or even by a nominated subcontractor. But these specific instances are merely illustrations of the general right conferred on the architect to issue instructions relevant in some way to the contract. Clearly, therefore, the contractor is bound to obey these instructions but then the question immediately arises—do they alter the contractor's prime agreement, namely to execute the works described in the bills and shown on the drawings for which he has had his price accepted? If they do then it follows that that price may be inadequate to cover the cost of this alteration to the contractor's prime agreement. In so far therefore as these instructions alter this prime agreement and are not issued as a result of any fault by the contractor, e.g., doing bad work which the architect has to instruct him to rectify, it would seem only fair that the contractor should either be paid if these alterations

involve him in loss or expense or given some other benefit as compensation.

Specific Instructions

This principle has of course, in part and for many years, been recognised but so far there has not been inserted in the contract any general right to compensation or other benefit which would balance the general right of the architect to issue instructions relevant to the contract. Instead the method in the R.I.B.A. Contract has been adopted, at least since the 1931 edition, of setting out those specific instructions which may involve the contractor in loss or expense and giving him a specific right to claim such extra cost. These specific instructions are those set out in sub-paragraphs (a)-(h) of Clause 1 and given the title referred to above namely "Architect's Instructions." The right to claim extra cost for compliance with these "Architect's Instructions" is given in the all-important penultimate paragraph of Clause 1 which states, "If compliance with Architect's Instructions involves the Contractor in loss or expense beyond that provided for in or reasonably contemplated by this contract, then, unless such instructions were issued by reason of some breach of this contract by the Contractor, the amount of such loss or expense shall be ascertained by the Architect and added to the Contract Sum." Unfortunately it was not made clear in the 1939 edition that this penultimate paragraph was directly linked with the specific instructions labelled "Architect's Instructions;" in the penultimate paragraph in the 1931 edition the words "as aforesaid" appeared after "Architect's Instructions" in the penultimate paragraph thus clearly linking the two. There is little doubt though that this is still the meaning.

The following questions now arise. Given the general right, or in some cases the specific duty of the architect to issue instructions, is the right of the contractor to be paid any extra cost resulting therefrom sufficiently met by the penultimate paragraph of Clause 1? If not, are there any other remedies? If so, are these other remedies adequate?

To answer the first question one must look at the specific "Architect's Instruction" listed in Clause 1, paragraphs (a)-(h). The most important claims for extra cost of course relate to variations and additions or omissions or substitutions for any work and these are the subject of paragraph (a); the penultimate paragraph of Clause 1 used in conjunction with the valuation rules of Clause 9 where variations are concerned should be adequate to give the contractor proper remuneration. The other claims possible under the penultimate paragraph relate to Architect's Instructions to remedy discrepancies between drawings and/or Bills of Quantities, to remove or re-execute works, to alter the order of execution of the works, to open up works for inspection, to dismiss any person employed on the works, to remove materials and/or substitute other materials therefor; provided these Instructions are not issued because of any default by the contractor, and provided the contractor can show loss or expense, he can recover the extra cost involved.

Important Omissions

The most important omissions from this list of Architect's Instructions are firstly those instructions which the architect issued as a result of deciding to nominate for certain work or for the supply of certain materials and second those which he is under a duty to issue after a request from the contractor. In regard to the first omission this means that delay in issuing a nomination for example cannot give rise to a claim under the contract for

extra cost though it could quite conceivably delay a job and cause considerable extra expense to the contractor. In regard to the second omission a failure to get instructions a contractor needs could quite easily result in loss and expense but again no claim is allowed under the contract.

The answer to the first question is therefore that the list of "Architect's Instructions" in Clause 1 contains some serious omissions so that in some circumstances a claim under the penultimate paragraph cannot arise. Are these omissions however because the contract provides some other adequate remedy?

To answer this one must turn to Clause 18. By this clause it is true that the contractor would have a claim for extension of time at least for one of the omissions referred to above and for both if the contractor has in fact requested a nomination in writing from the architect and not received it when it was needed. But all this means however is that the threat of having to pay liquidated damages for failure to complete on time can be averted. If, though, the contractor does by extra effort in fact complete on time he will not need any extension of time and cannot be repaid for the cost of this extra effort which he has had to make as a result of the default of the architect. The remedy under Clause 18 seems therefore not wholly adequate.

There is also the remedy or right if, as a result of Architect's Instructions in Clause 1 or of the various reasons (except strike or lock-out) for a claim for extension of time in Clauses 18 and 18(a), the whole works are delayed for a month for the contractor to determine the contract. This is however so drastic a step that except in exceptional circumstances it can hardly be considered a remedy of any practical significance.

No General Right

Thus it appears that the contractor's right to claim for extras is on the whole not too unsatisfactorily dealt with under the R.I.B.A. Contract. But there is no general right to a claim comparable to the general right of the architect to issue instructions. Instead the authors of the Form have chosen to single out certain instructions and give the right to the contractor, as a result of these instructions, either to a claim for money to reimburse the loss or expense involved and/or to a claim for an extension of time or to determine the contract. Not surprisingly, when this singling-out process was adopted, there have been some omissions, the chief ones being instructions in relation to nominated sub-contractors and suppliers and instructions which the architect is under a duty to issue on written request from the contractor.

No doubt in an ideal world the architect's unfettered right to issue instructions would be balanced by a corresponding right in the contractor to claim for any resultant loss or expense he suffers. This ideal state is not reached in the existing R.I.B.A. Form and if indeed the delay in publishing the revised Form is caused by any desire to limit still further the contractor's claims for extra payment as a result of architect's instructions then one cannot blame the contractors for their refusal to give up such protection as they already have.

BRISTOL-BIRMINGHAM MOTORWAY

With reference to the report appearing in our last issue of the impending award of a contract for the above scheme, we have been asked by the Ministry of Transport to state that the contract has not yet been let.

HIGHWAY ENGINEERS DISCUSS RECENT DEVELOPMENTS IN BRIDGE DESIGN

THERE was a large attendance at the recent meeting of the Institution of Highway Engineers when Mr. C. S. Chetoe, B.Sc., M.I.C.E., and Mr. P. F. Stott, M.A., A.M.I.C.E., presented their Paper "Recent Developments in Highway Bridge Design."

In the ensuing discussion Mr. G. Day (county surveyor, Cheshire) pointed to a statement in the Paper that both the four-span and two-span bridges required a central support between the two carriageways, and that this support required to be made substantial enough to stand after collision damage. He asked for the authors' views on providing a plinth at the base of a bridge to provide adequate support. He believed he had seen that done on the Preston By-pass.

Concerning the authors' point that the earth slopes under side spans should be pitched, a practice which gave some scope for the use of local materials, he said he had seen paved slopes and he was quite certain that local materials could be used with far more pleasing effect.

Commenting on a suggestion to use the new broad flange beam, he said that with composite reinforced concrete decks he thought it would be an economic alternative to prestressed concrete for spans up to, say, 76ft.

Mr. H. C. Adams (assistant chief engineer (bridges), Ministry of Transport) said that on the structural side the field of bridge designing was very largely still a battle ground. But on the aesthetic side the underlying principles were becoming fairly clear cut.

The authors had called attention to the lightness which we were coming to associate with our modern bridges, due, of course, to the introduction of prestressed concrete; that was probably the predominant factor in bridge design, the drive towards slenderness in the horizontal lines of many of the bridges.

There must be a limiting depth/span ratio, but there were various devices to achieve the appearance of slenderness even where it did not exist—as, for instance, in the transverse cross-section, by arranging a slender cantilever at the side which cast a small shadow beneath it and so split up the depth into two or three horizontal lines.

Abnormal Loads

He asked to be allowed to suggest one or two slight corrections in the Paper in connection with the references made to abnormal loads. There was interest in abnormal loads and it was rather important that we should get our ideas clear on the matter.

Under the heading "Highway Loads" it was stated: "Normal loads are covered generally by the Construction and Use Regulations of the Ministry of Transport. Until recently the heaviest such load was a 22-ton lorry on three axles, the two back axles each of 8 tons; the loads are gross loads. This has now been increased to 24 tons, with back axle loads of 9 tons each." Mr. Adams said these Regulations were changed in April, 1955, and that lorry was required to be carried, not on "three axles," but on "not more than six wheels." The 1955 revision allowed for locomotives with more than six wheels to weigh up to 30 tons, and the maximum wheel load permitted was 11 tons.

The Paper also stated that the maximum wheel load, for abnormal loads, was 11½ tons. That was so if we divided the number of wheels by the number of axles; but the Regulations actually permitted 11½ tons.

Abnormal loads up to 150 tons were also allowed the free use of the road. There was no power to stop the vehicles

except by placing a restriction Order on a bridge, and that might have to be done even on some of our new bridges. There was another clause relating to loads above 150 tons, the movement of which was completely controlled, because they could move only by Special Order made by the Ministry of Transport. Those loads must be provided for.

To show how the number of loads above 150 tons (the gross weight of the load and the vehicle) was increasing, he gave the following figures: In 1957 there were 52; in 1958, 71; in 1959, 86. The number was still growing, largely in connection with the development of nuclear power stations. In 1959, 22 of such loads were in excess of 200 tons each. The heaviest was 260 tons, and there were six of those; they were heat exchangers which were moved by road 1½ miles and then brought by sea to their site. There was always some sort of road journey in connection with them, and very often they could not be moved by sea. The next heaviest load was 228 tons, which travelled from Stafford to Birkenhead docks.

The 150 tons as the maximum permissible load might have been slightly misunderstood. It was not quite correct to say that the Ministry of Transport maximum was 150 tons; that was a hypothetical figure merely dividing one class of vehicles from another, it was the limit for those that could be moved under one set of Regulations. Heavier loads were completely controlled, for their movement required a Special Order.

Arch Structures

Mr. Adams shared the authors' liking for the use of the arch in bridges. It could be used most appropriately over rivers, because if we attempted to use it over a motorway, or over any road where we had to preserve high vertical clearance at the sides of the carriageways and beyond, over the hard shoulders, we should find that in most cases it was impracticable, because we should have to take whatever was carried by the arch so high up, and it became expensive. Where two roads crossed at substantially different levels, a difference of 30ft. or 40ft., and where the foundations were suitable, the arch was a very fine structure to use.

In the Paper it was stated that the most difficult overbridge to design satisfactorily is that carrying a subsidiary road with a steeply rising gradient over a motorway. Mr. Adams said we could add to that, as Mr. Chetoe had noted, a heavy skew, a curve and super-elevation, and then the problem became almost insoluble. The Ministry had experience of one or two such cases, and to his mind we could not get a completely satisfactory result in those conditions.

Footbridges over motorways and roads presented difficulty, mainly because of the heavy appearance we were bound to get where there were ramps and stairways at the sides; it was very difficult to make them fit in, in proportion, with a slender footbridge. One example was the footbridge over the Markgate By-pass, where the bridge itself was a very elegant and slender structure, but it was unavoidably spoiled by the masses of blocks at the sides which carried the stairways and ramps.

The happiest solution of that problem which he had seen, and he believed it was the brainwave of the Institution's president, Mr. James Drake, was on the Preston By-pass, where a footbridge had been arranged in the form of a reinforced concrete arch, and the stringer beams had been so shaped that they hid completely the stairs leading up to the footbridge.

Mr. CHETOE, replying to Mr. Day's remark concerning the use of plinths, said

they provided an excellent way of dealing with centre piers. There was a great variety of possibilities. We had so much standardisation nowadays that he felt we should take every opportunity to use local materials.

He shared Mr. Adams' love for arches and suggested that possibly the Ministry of Transport or the authorities in the areas might encourage their use when rebuilding by examining the kind of formwork required, which might be adjusted.

Steel Bridges

Mr. BEST referred to the type of steel bridges mentioned in the Paper where the road surfacing was laid directly on the steel plate, and said some bridges which would be going up shortly in London would have this type of deck. He had been in Germany recently, and there they had had a certain amount of trouble due to the road surfacing breaking up after several years of service.

As mentioned in the Paper, various methods had been used in Germany, including the use of steel strips welded to the plate as retainers for the asphalt, which he did not think was very satisfactory owing to the degree of welding required.

Some designers in Germany were of the opinion that, since the asphalt surfacing represented a relatively small proportion of the total cost, and it was fairly easily renewable, why should the design suffer? Why not design to the limit with the monolithic or orthotropic type of deck and renew the surfacing as required after some years? He personally did not agree with that, but he would like the views of the authors.

Referring to the Ascot Road bridge, Maidenhead By-pass, he asked what happened over the supports.

Mr. Chetoe said the Germans had used a great variety of decks. One bridge had a steel deck with concrete on the top, its reinforcement being welded to the steel plate.

Mr. STOTT illustrated the detail of the supports used for the Ascot Road Bridge; the cross head was flush with the underside of the precast beam. It was in fact a simply supported construction.

Mr. J. D. HARRIS (Messrs. A. J. and J. D. Harris) thought it could safely be said that about 30 years ago we had led the world in the construction of bridges here and abroad. They were chiefly steel bridges, and many firms here were still called in to deal with the largest bridges around the world.

Different Factors

We should bear in mind that the labour and materials factors in Germany were very different from those here, in that they seemed capable of working hard off the ground as well as on the ground. Their large bridgeworks in prestressed concrete were *in situ*. He doubted very much that that would be economic here; in Germany they were in the fortunate position of having the most developed prestressed concrete industry in the world. Even so, they were still basically a selection of small firms which worked to everybody's advantage; the prices were less and services all round were better.

By the same token, perhaps, the steel people had suffered in that sense. In the old days they had formed themselves into associations and they had to have a real "surgical operation" to straighten things out and get on to their feet again. Whether they would be able to compete with the "backyard" industry of precasting in this country it was difficult to say. But he did feel that the contribution of this country for bridges in the future—and we were on the brink of some very large works—

would be in the precast field. The excellent example of the Hammersmith flyover rather suggested where we were going.

He would hate this country to end up with bridges like the Continental ones, because our problems were the labour and materials factors; everything about ours was so different and we wished to keep it so.

Germans' Advantage

Mr. Chettoo said the Germans had had a great advantage over us for a considerable period, in that they had had a great many bridges to design, whereas we had had very few. The Germans had quite a lot of aesthetic taste.

Mr. Stott confirmed the view that we should not slavishly follow Continental examples. The interest they might have for us was to show how particular problems were tackled in different circumstances and to enable us to consider how their methods applied to our own problems. Perhaps the main immediate impression he had formed in Germany was the high standard of concrete work.

Mr. F. K. SMITH (Freeman Fox and Partners) referred to the Ascot Road Bridge on the Maidenhead By-pass, which interested him because he was involved in the design of a bridge in which the post-tensioned system was being used, and one of the problems was that of the bearing length over the supports. He asked what the authors thought about the idea of bearing on the supports for post-tensioned beams, and also for pre-tensioned beams, which indicated that for pre-tensioned beams we needed a bigger distance. On the Maidstone By-pass the problem was overcome by overlapping the beams over the supports.

Mr. Stott felt that it was impossible to deal with the matter generally, for each particular arrangement had its own problems.

Mr. W. R. C. TAYLOR (Supercrrete, Ltd., St. Boniface, Manitoba) said the problem which had been bothering him since he came to this country was that of the differences in bridge structures as between this country and the North American continent, where they used the box section to some extent; but there were a great number of simply supported "T" beams with a composite deck on top. He wondered what the authors thought about the economics.

Mr. Stott replied that he was surprised by the sort of composite design in which prestressed concrete beams replaced what

in the past might have been a steel beam in a composite construction, now often used for longer spans, say, 70ft. and upwards. He suspected that the reasons why the inverted "T" beam form of construction was still popular here were not only economic. We had a very closely built up system of roads, and there were inherent in many of the locations close limitations of construction depth.

Mr. HINSLY added that the inverted "T" beam in concrete was generally used for spans of up to 40ft.-50ft. He asked for the authors' comments on the use of the large bored pile, which was becoming quite a practice in this country.

Mr. Stott, speaking of large cylinder foundations, said that in his opinion they were a very welcome addition to the army of foundation tools. Cylinders as such had a long history in bridge foundation work, but in this country at any rate it was only the recent flood of highly developed plants for sinking these large cylinders which had really made them an economic proposition for general use in suitable circumstances.

Availability

Much of the economics of their use must depend on the extent to which the equipments were readily available. We had had the experience of cast in-situ piles, and as the firms operating these processes had grown it had become a very economical method of using that sort of foundation even in very small quantities. He thought that when the operators had developed their techniques and equipment, the use of these cylinder sinking plants would tend to spread down to quite small jobs.

The fact that they had not been developed before now was due to the non-existence of the demand. A lot of our foundation work in this country tended to be developed by the dreadful conditions along the coasts, where we had very deep soft deposits, gravel layers, etc., but where big loads could be carried he was sure these new techniques and equipment would come into use.

Mr. SMITH (Lancashire C.C.) said that in Lancashire they could not complain of the lack of publicity which some of their schemes had been given in the Press! But he thought it was a pity that many of the bridges in this country had not received the informed publicity which they merited; he considered that less emphasis should be placed on Continental and American bridges and a little more on our own structures.

In the very substantial number of bridges built in Lancashire during the last few years they had produced variety of form at the various sites, with not undue emphasis on standardisation, which had its place, but should not be given too much prominence. They had adopted open bridge parapets universally, except in the case of railway bridges.

Steel Deck Asphalt

DR. LEE (R.R.L.), commenting on the earlier reference to having asphalt on a steel deck, asked if it were possible to take into consideration the stiffness of the asphalt itself under transient load in the design of the structure. It had been found that it did give quite an amount of stiffness to the passing vehicle.

Dealing with the problem of the settlement of the approaches to the abutments, he said he believed it was suggested that it had been overcome by the use of stabilised soil in some cases. But he thought that did not mean for the whole embankment.

Mr. Chettoo did not know whether the stiffness of the asphalt on a steel deck was taken into account in the design.

Mr. Adams did not think it had been proved sufficiently reliable. One had heard of cases in Germany of the cracking of the asphalt, and plastic yield.

Mr. Stott, on the question of using stabilised soil in the approach embankment, said that on a very heavily trafficked structure it was very undesirable to have to go back and perform remedial work on the road. Where that had been necessary the method used was to produce very weak concrete, the filling material for which was put through a mixer. It was not a cheap process, but it did guarantee, subject to a stable foundation, that the relative movement of the embankment to the abutment would not be serious.

CJB TO BUILD REGENT INSTALLATION AT CARDIFF

Regent Oil Company has awarded a contract to constructors, John Brown, Ltd., for the design, purchase of materials and construction of their new oil storage installation at Cardiff, excluding the supply and erection of the oil tanks.

This new installation will have tanker off-loading facilities and loading facilities for rail, road and coastal traffic for both black and white oils.

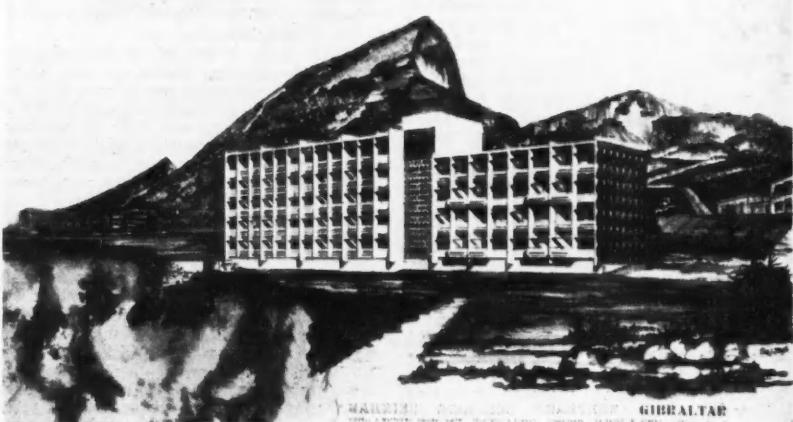
CONTEMPORARY ARMY QUARTERS

HUMPHREYS, LTD., London, have been awarded a £150,000 contract to build married soldiers quarters on the Rock of Gibraltar.

Work is now starting on the new building which will consist of 20 two-bedroom flats, eight maisonettes (on two floors with private staircases) with three bedrooms.

The contemporary design of the block involves the use of concrete, structurally and decoratively, using different types of finish to give added interest. In particular, vertical and horizontal sun-breakers consisting of reinforced concrete fins will be used to control the glare of the sun.

A spokesman for the architects, Covell and Matthews, said that one of the most interesting features of the treatment of this design was its arrangement in relation to the steep face of the Rock. A bridge from the road will give access to the second floor and a ramp will give access to the ground floor, thus minimising the amount of stair climbing for any family living in the block. All the quarters will have soundproof floors. Another feature is the installation of unusually large rainwater storage tanks in the basements.



An artist's impression of the completed building

AMERICAN AND CANADIAN HOUSES IN IDEAL HOME EXHIBITION "VILLAGE"

THE "village" feature of the Daily Mail Ideal Home Exhibition which opens at Olympia on March 1, will this year comprise nine dwellings two of which will be of transatlantic design.

One is an all-American house designed by a special committee of the National Association of Home Builders' Research Council—a non-profit trade association serving the American building industry. The living area, exclusive of carport, is about 1,550 sq. ft. and the exterior materials used are masonry, wood, hardboard and asphalt roof shingles.

The house has a foyer, entered from a covered porch with, to the left, the bedroom wing and, to the right, the living area. The bedroom area contains three bedrooms with large closets and two full bathrooms. A centrally located formal living room area is the focal point of the interior design, with a dining room extension convenient to the kitchen and opening to the landscaped backyard.

The kitchen, which opens to the family area and informal dining area contains a cooking island with barbecue grill, counter-top range and suspended exhaust hood, refrigerator, built-in oven, dishwasher and sink with garbage disposal.

Adjacent to the side entrance from the carport is a washroom with its own "mud" closet, so that it is not necessary for children coming in from play to track across clean floors. Other design features include a clear span truss roof system, panelised exterior walls and gables, oak and vinyl tile flooring, aluminium windows and sliding doors and year-round air conditioning.

Room sizes comprise: Living room 12ft. 6in. by 26ft.; dining room 9ft. by 10ft.; kitchen 10ft. by 10ft.; family room 11ft. 6in. by 18ft. 6in.; bedroom 11ft. by 15ft. 6in.; bedroom 11ft. by 12ft. 6in.; bedroom 10ft. by 10ft.; carport 10ft. 10in. by 20ft. 6in.

The other house of transatlantic design is the British Columbia Lumber Manufacturers' Canada Trend house. This is on a split-level plan and has an area of

1,360 sq. ft., excluding the garage. The framework is of Pacific Coast hemlock sheathed with Douglas fir plywood beneath the horizontal wall cladding of Western red cedar.

Striking feature of the house is the low-pitched roof and projecting eaves formed of 2in. nominal tongued and grooved cedar planking. This solid roof has a weather covering of three-ply felt with a mineral finish, laid over 1in. insulation board. One layer of the roof covering has an asbestos base.

The hall is entered through a covered porch; to the left there is a cloakroom and a boiler room which has direct access to the garage below, and on the right the hall opens directly into the dining room which is adjacent to the kitchen. Steps lead up to the sitting room, the balcony of which is seen from below in the hall; sliding doors, fully glazed, are used on this side and the continuous windows are full height from floor to ceiling. Cedar has been used for facing part of one wall and the sitting room floor is of polished maple.

A short stairway leads from the upper living area to the bedroom floor where there are three bedrooms, a linen cupboard opening from the landing and a large bathroom. Two of the bedrooms have built-in cupboards.

The Canada Trend House, built in the cost range of £4,500-£5,000 inclusive of central heating, decorative wood treatments and maple floor, has the following accommodation: Living room 25ft. by 11ft. 9in.; dining area 8ft. 9in. by 7ft. 9in.; kitchen 9ft. 9in. by 7ft. 9in.; bedroom 13ft. 9in. by 10ft. 3in.; bedroom 10ft. 9in. by 10ft. 3in.; bedroom 10ft. 3in. by 10ft.

Other Dwellings

The rest of the "village" comprises: The New Ideal Homesteads' Queensbury bungalow; the Davis house; the Hallmark Homes Sussex bungalow; the Crouch house; the Berg Aldwick bungalow; and a pair of Unity Structures' houses.

The Queensbury bungalow is finished in facing bricks varied by cedar cladding. The lounge is lighted by windows on either

side of the fireplace and by a floor-to-ceiling picture window overlooking the garden. In the front are three bedrooms, the largest having wall-to-wall built-in wardrobes with folding doors. Electric panel fires are fitted in two of the bedrooms. The large garage has an up-and-over door at the front.

Room sizes are: Lounge 17ft. 6in. by 12ft.; kitchen 12ft. by 8ft.; hall 8ft. by 6ft. 6in.; dining recess 11ft. 4in. by 8ft.; bedroom 13ft. 9in. by 12ft.; bedroom 10ft. 6in. by 11ft. 9in.; bedroom 11ft. 9in. by 7ft.

The 1960 Davis house has an attractive contemporary elevation and is planned to provide a spacious three-bedroom dwelling with a flexible open-plan design on the ground floor. It has been planned as a labour-saving dwelling and incorporates electric underfloor heating in all rooms on the ground floor. It is constructed in two skins of 4½in. brickwork with a 2in. insulating cavity. The garage is an integral part of the house design and it has a paved flat roof for use as a sun terrace.

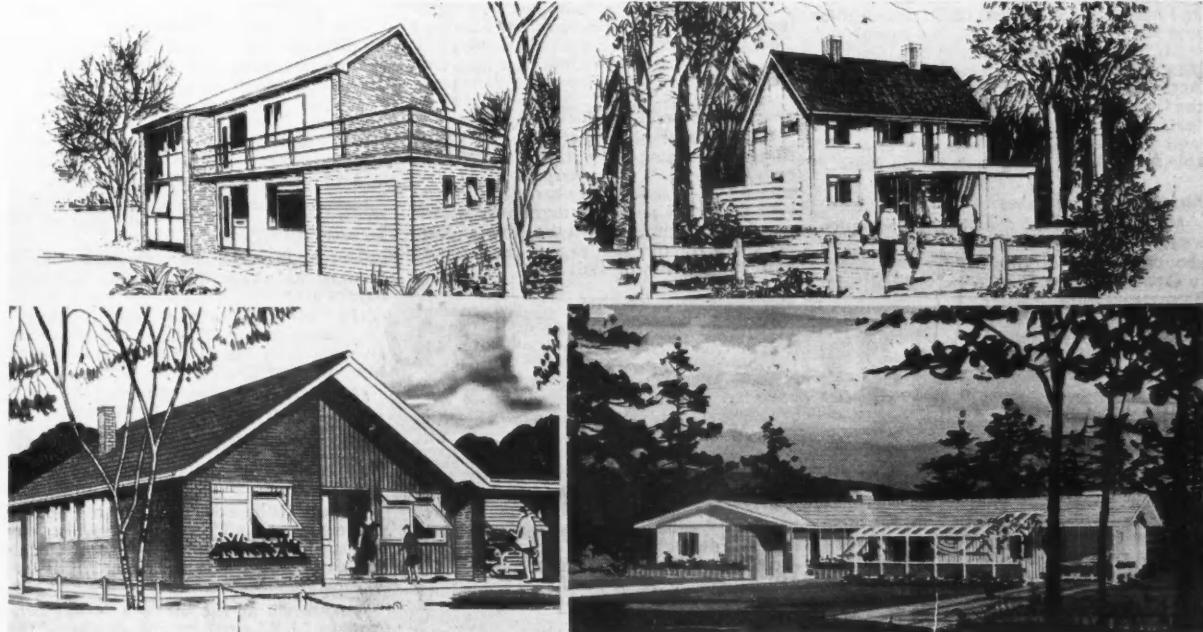
Room sizes are: Living room 18ft. 6in. by 12ft.; dining area 11ft. 11in. by 8ft. 9½in.; kitchen 11ft. 11in. by 10ft.; bedroom 11ft. by 9ft. 3½in.; bedroom 12ft. 5in. by 9ft. 0½in.

The Hallmark Homes Sussex bungalow is planned for a southern aspect. Cavity walls are constructed with 2in. Keymer Sussex stock bricks of a brown shade. The 2in. cavity is filled with pelleted fibreglass and an inner leaf of Lignacite blocks. The roof is covered with Marley Marigold plain tiles. Radiation Duct air heating gives selective central heating to the entire bungalow.

Room sizes are: Lounge 18ft. by 12ft.; dining recess 9ft. by 8ft.; kitchen 14ft. 8in. by 9ft. 8in.; bedroom 12ft. by 12ft.; bedroom 12ft. by 10ft.

The house built by G. T. Crouch, Ltd., provides accommodation for two reception rooms, four bedrooms, kitchen, bathroom and downstairs cloakroom. It is constructed principally with brick elevation and with a panel of vertical boarding over the porch and garage. The roof is of

(Concluded on next page)



Above: Left, the Davis Estates' house; right, the Crouch house.
Below: Left, New Ideal Homesteads' Queensbury bungalow; right, the all-American house

In Parliament

RISING LAND PRICES: EFFECT ON LOCAL AUTHORITY HOUSING

LOCAL authorities, like private builders, are becoming increasingly concerned about the effect of rising land prices on their housebuilding activities. This was evident in the Commons last week when Mr. A. Henderson asked the Minister of Housing and Local Government whether his attention had been called to the effect of the Town and Country Planning Act, 1959, upon the purchase price of land, and what steps he proposed to take to enable local authorities to purchase land for housing purposes at reasonable prices.

Replied Mr. Henry Brooke: As I understand it, the right hon. and learned Gentleman is suggesting that local authorities should not pay the market value for land which they purchase for housing purposes. But it was a principal objective of the Town and Country Planning Act, 1959, to substitute this just requirement for the previous formula under which an owner might receive compensation well below the market value of the land.

Mr. Henderson: Is the Minister aware that, in 1955, twenty acres of land required by the Rowley Regis Borough Council for housing was valued by the district valuer at £5,000, and that, in November of last year, it was valued for the same purpose at £48,000? Does not the Minister consider that this will have a crippling effect on the efforts of local authorities, not only to provide housing but to provide playing fields for the country's youth?

Mr. Brooke: I could not make any comment on the case quoted by the right hon. and learned Gentleman without knowing the full circumstances and, in particular, without knowing whether any new planning permission in the interval had affected the value.

Mr. M. Stewart: Although the case quoted by my right hon. and learned Friend the Member for Rowley Regis and Tipton (Mr. Henderson) is particularly striking, is the right hon. Gentleman aware that it is only an example of a general tendency throughout the country that is worrying a great many local authorities and has been commented on in responsible journals? Will he look at this again?

Mr. Brooke: I hope that the hon. Gentleman does not wish to go back on the 1959 Act, which established market value as the basis for compensation. I must say that, as long as we hold to green belts, land in their neighbourhood that is available for building is bound to rise in value.

Birmingham Expansion

Mr. Lindsay asked the Minister when he would be able to announce his decision about the City of Birmingham's proposal to expand into the Borough of Solihull and Bromsgrove rural district.

Replies, Mr. Henry Brooke said that this was a most important case which raised very complex issues and concerned more than 2,400 acres of land. He would announce his decision as soon as possible.

Mr. Lindsay: Does my right hon. Friend agree that large cities must not be allowed to expand all over the country, and especially in countryside designated as green belt? We confidently look to him to uphold this principle.

Mr. Brooke: In all courtesy to my hon. Friend, he will not tempt me into expressing any view on this difficult application until I am ready to announce a decision.

Watling Street

The Minister told Mr. Matthews that in the near future constructional work would start on the widening of A.5 between

Atherstone and the Isolation Hospital; the contract for a new roundabout at Grendon would be advertised. These were the first of a series of schemes for the comprehensive improvement of the trunk road between Witherley and Fazeley, but he could not yet say when the Atherstone By-pass could be included in his programme.

Improved lighting to traffic route standards was already installed through Dordon and would be installed at the new roundabout in Grendon. No application had been made by the lighting authority for improved lighting on the remainder of this length of A.5.

Street Lighting

In a written answer, the Minister of Transport, Mr. Ernest Marples, informed Lady Gammans that provided the street lighting was in accordance with the British Standard Codes of Practice, which did not specify colour or type of lamp, there was

Readers HAVE YOU POSTED IT?

Readers who obtain their copies of "The Contract Journal" from newsagents will find enclosed again this week a Readership Survey Card. Those who have not already returned a card are asked to complete and post this card as soon as possible.

This Survey which is being undertaken by the publishers of "The Contract Journal" will benefit both readers and advertisers whose co-operation will be greatly appreciated.

no evidence to show that confusion was caused by differences in colour or design.

As local authorities installing new lighting systems usually followed these Standard Codes of Practice, he did not think there was any need for legislation imposing uniformity.

Lancaster-Penrith (Motorway)

Questioned by Mr. Holt about an extension of the motorway north from Lancaster to Penrith, Mr. Marples stated that consulting engineers were carrying out surveys of all the possible alternatives with a view to recommending a line for a draft scheme. He did not expect their report until the autumn of 1961.

Merionethshire Hospital

Speaking in an adjournment debate on hospital facilities in Merionethshire, the Parliamentary Secretary to the Ministry of Health, Miss E. Pitt, said that work was expected to start later this year on new accommodation at Bronglais Hospital, Aberystwyth. The estimated cost was £872,000.

There were other developments, she continued. The Welsh Hospital Board were considering the need to improve facilities in the Wrexham area, and plans for a further development at Oakwood Park Mental Deficiency Hospital to provide for 450 patients were in hand.

The number of motor vehicles in use on the roads of Great Britain rose by over 700,000 last year to 8,606,047.

(Concluded from previous page)

dark brown pantiles and a continuous flat roof over the garage projection and the front door provides a deep porch and covered access to the garage itself.

Room sizes are: Dining room 12ft. by 11ft. 6in.; lounge 19ft. 7in. by 11ft. 6in.; kitchen 12ft. 9in. by 9ft.; garage 17ft. 4in. by 8ft. 6in.; bedroom 17ft. 2in. by 11ft. 6in.; bedroom 14ft. 6in. by 10ft.; bedroom 12ft. 7in. by 9ft.; bedroom 10ft. 1in. by 8ft. 6in.

The Aldwick bungalow built by E. and L. Berg, Ltd., planned by their architects with a view to development of the rural sites which they have recently acquired at Liphook in Hampshire, Angmering and Bognor in Sussex, has two double bedrooms, but the planning makes it possible for the roof space to be utilised to provide two further bedrooms if required. The price is from £3,995 including land, the extra cost of construction for the utilisation of the roof space being in the region of £1,500.

Room sizes are: Lounge 18ft. 5 $\frac{1}{2}$ in. by 13ft. 11in.; dining space 11ft. 11 $\frac{1}{2}$ in. by 11ft. 8in.; bedroom 15ft. 5 $\frac{1}{2}$ in. by 11ft. 5in.; bedroom 15ft. 8 $\frac{1}{2}$ in. by 10ft. 2in.; kitchen 12ft. 9in. by 12ft. 3 $\frac{1}{2}$ in.

Unity Structures' houses at the exhibition are a pair comprising Type 5701 which is a three-bedroom, four-person house and Type 5706 which is a three-bedroom, five-person house built on the crosswall principle. Either of these types can be built in terraces.

A special feature of the houses is that they never need outside painting, the Lustralite windows are plastic-faced, the Uniflow combined gutter, soffit and facia and the downpipes are asbestos obtainable in self-colour or a special colour glaze which is applied at the factory; the remaining exposed timber is siliconised cedar.

Room sizes, Type 5701: Living room 15ft. 5in. by 11ft. 11in.; dining area 8ft. 4in. by 7ft. 5in.; kitchen 8ft. 4in. by 7ft. 5in.; bedroom 15ft. 8in. by 8ft. 9in.; bedroom 8ft. 9in. by 8ft. 6in.; bedroom 10ft. 9in. by 6ft. 4in.

Room sizes, Type 5706: Living room 14ft. 10in. by 11ft. 1in.; dining area 9ft. 1in. by 9ft. 1in.; kitchen 8ft. by 9ft.; bedroom 13ft. 2in. by 10ft. 3in.; bedroom 11ft. by 9ft. 2in.; bedroom 10ft. 3in. by 6ft. 10in.

I.E.S. SUMMER MEETING

The Illuminating Engineering Society is holding its biennial summer meeting this year at Harrogate from Sunday, May 15, to Wednesday, May 18.

The programme includes a number of changes, the chief of which is the reduction of the number of formal papers to three and the devotion of one day to the study and discussion of technical subjects of wide topical interest which are now being considered by the technical committee of the Society.

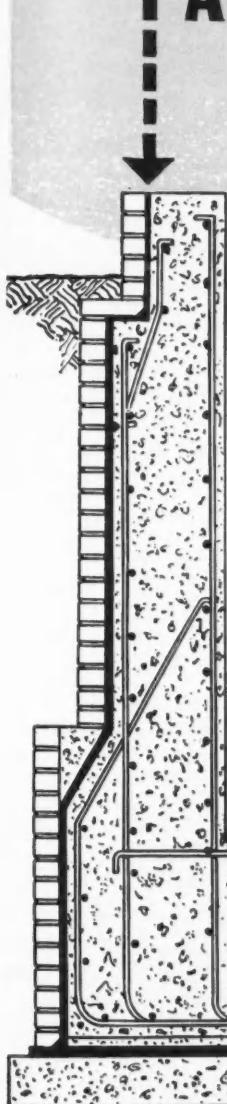
The trend of the programme is to look forward into the next few years. The three papers are:

- (1) "Progress in the field of electric lamps," by H. G. Jenkins of the research laboratories in the General Electric Co., Ltd.;
- (2) "Rationally Recommended Illumination Levels," by H. C. Weston.
- (3) "Plastics, Yesterday, Today and Tomorrow," by C. L. Child of the plastics division, Imperial Chemical Industries, Ltd.

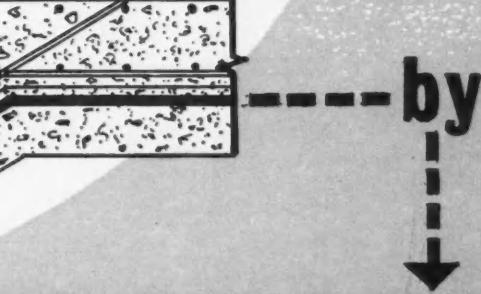
Subject to be considered at the discussion meetings on Tuesday, May 17, include task analysis, luminance and glare, modelling and colour, industrial area floodlighting, maintenance and lighting calculations.

Attendance at the meeting is not confined to I.E.S. members and details of the meeting can be obtained from the Secretary, I.E.S., 32 Victoria Street, London, S.W.1.

ASPHALT TANKING



Permanite Limited are specialists in the application of Asphalt to all underground structures against the penetration of water, e.g., basements, tunnels, reservoirs, etc., and also for the water-proofing of bridge decks.



PERMANITE

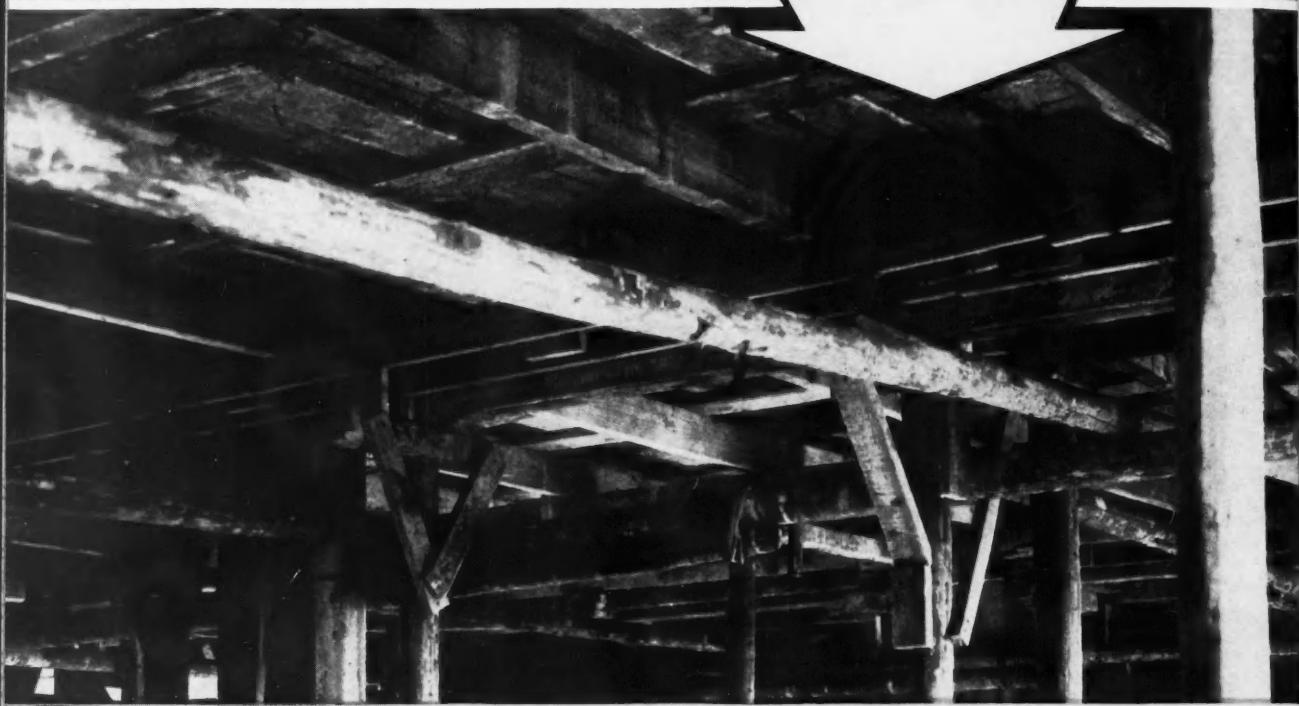
L I M I T E D

LONDON
Tel: ADVance 4477

BIRMINGHAM
Tel: BIRchfields 5041

MANCHESTER
Tel: BLACKfriars 9449

Slab Formwork 1936



24 YEARS AGO, when ACROW was founded, the two pictures shown immediately above represented the commonly accepted method of shuttering for reinforced concrete slabs.

COMPARE them with the two pictures shown on the right hand page to appreciate the contribution made by ACROW towards speedier, more economical and more efficient slab-shuttering, culminating in the system recognized by leading building contractors in many countries as being the finest available.

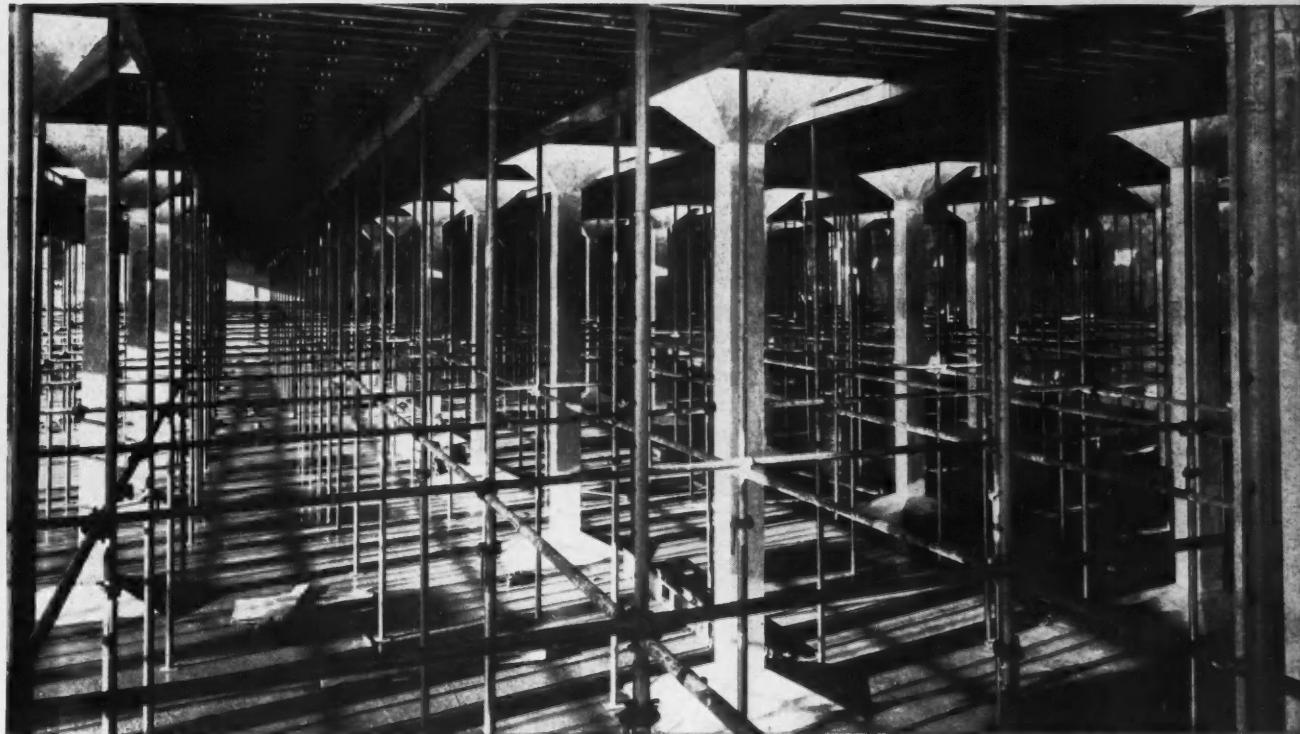
Top picture, right hand page: New Surgical Block, Guys Hospital, London. General contractors: Messrs. Y. J. Lovell & Sons Ltd.

Lower picture, " " " : Herongate Reservoir, Essex. General contractors: Messrs. W. & C. French Ltd.

Bracing of props (necessitated by 16 ft. floor to ceiling height) is 7 ft. above floor level to allow free flow of men and materials.



Slab Formwork 1960



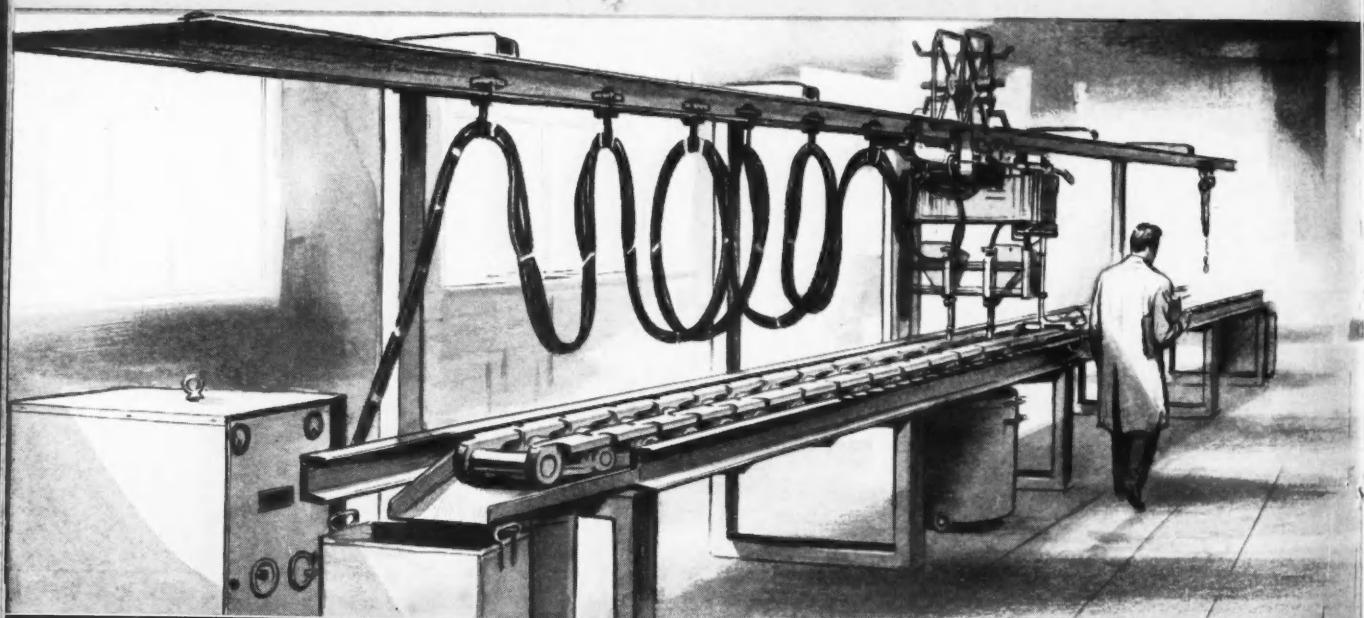
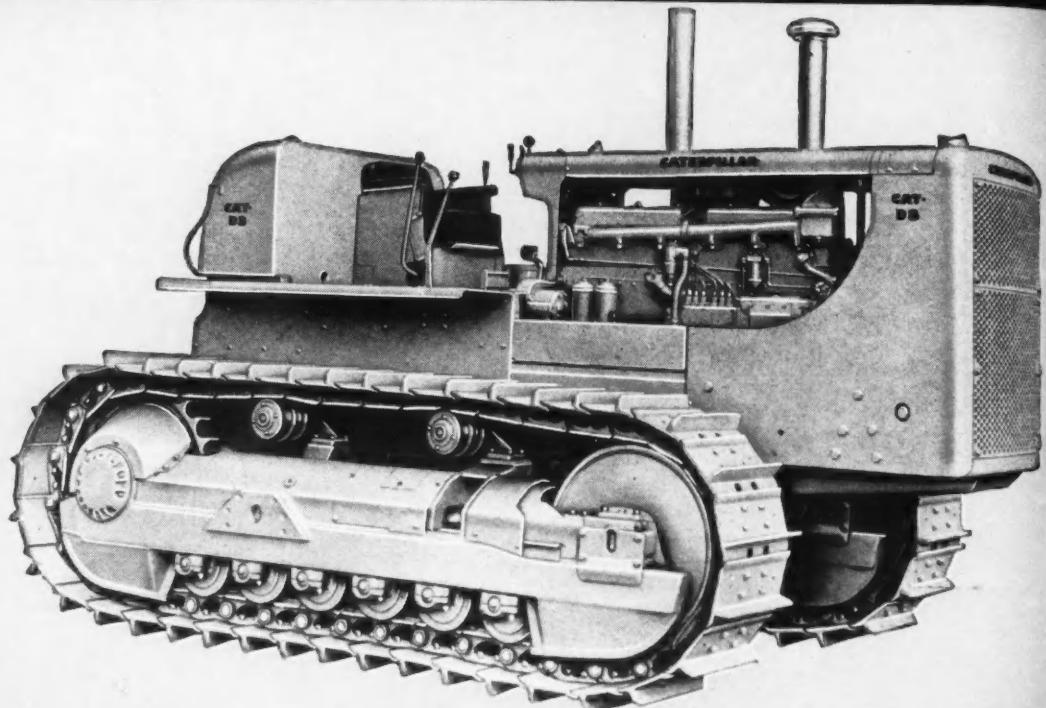
ACROW V-FORM system
of shuttering for slabs, beams, columns and walls

FOR MORE INFORMATION SEND FOR THIS BOOKLET

ACROW (ENGINEERS) LTD. SOUTH WHARF • LONDON • W2 • AMBassador 3456 (20 lines)



FRED MYERS FIRST AG FASTEST TURN R



full details from

FRED MYERS LTD

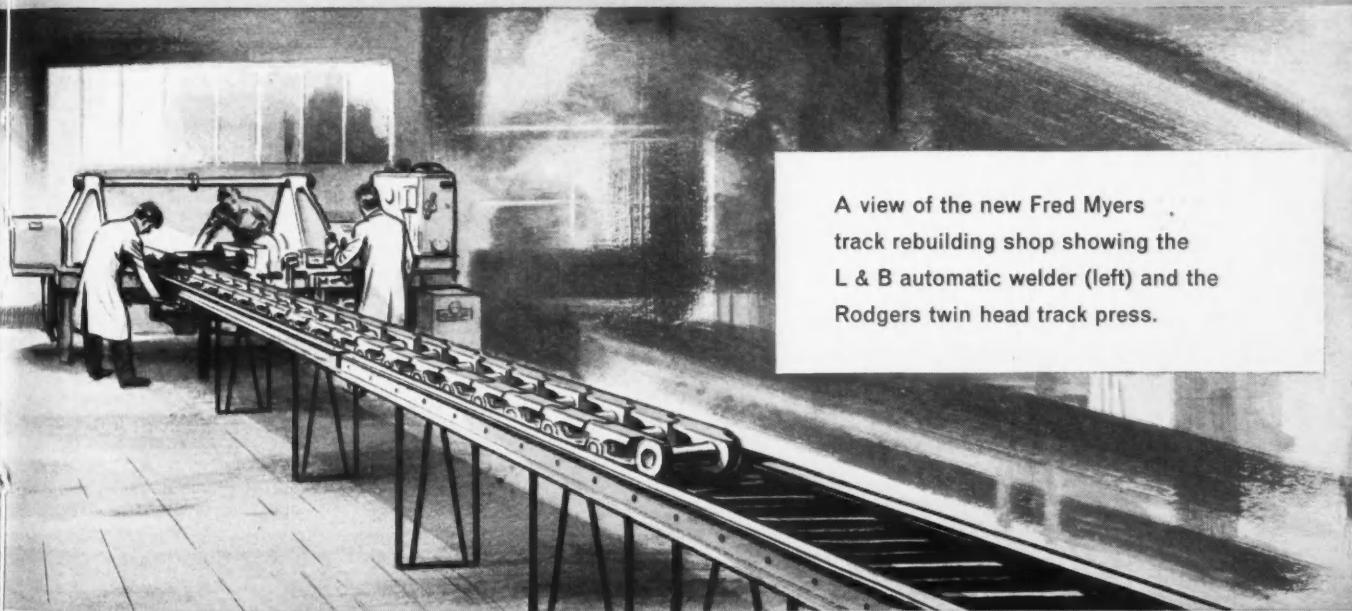
FRED MYERS LTD Maidenhead Road Windsor Berks Windsor 1913 · Southend A

GAİN WITH THE ROUND FOR TRACKS!

Our new track reconditioning shop at Windsor now includes a NEW
L & B Electronically controlled, fully automatic double headed
link welder and a Rodgers twin head track press.

For a top quality track reconditioning job in half the time—
come to Fred Myers—or better still—let Fred Myers come to you!

TOP QUALITY REBUILDING FASTER SERVICE FREE collection and delivery



A view of the new Fred Myers
track rebuilding shop showing the
L & B automatic welder (left) and the
Rodgers twin head track press.

ERS your CATERPILLAR dealer

Caterpillar and Cat are registered trademarks of Caterpillar Tractor Co.

End Arterial Road Brentwood Essex Herongate 251 • Chart Road Ashford Kent Ashford 1771

EQUIPMENT SALES 24 Princes Street, London W1 01-580 2222 01-580 2223

The only lightweight Cement Silo with ALL THESE ADVANTAGES

ACROW PORTABLE SILO

Positively
no
condensation
in Silo

Can feed
two mixers

Contents-
Indicator
at operational
level

Rolling action
on to and
down from lorry
reduces labour
in transport

Bellows
ensure smooth
cement-flow

Maximum
strength
combined
with
light weight
and stability

Automatic
weighing

Capacity of Silo	Total Weight	Maximum Height	Maximum Width	Capacity of Weigh-hopper (ex Works)	Price
15 ton	3,000 lb.	17ft. 6in.	8ft. 6in.	300 lb.	£565
25 ton	3,250 lb.	22ft. 9in.	8ft. 6in.	300 lb.	£698

STEEL ROAD FORMS

STANDARD TYPE

For light work where road-making machines not used.



TRACK TYPE

Serves also as track for light road-making machinery.



Dual-Purpose TRACK TYPE

Can be used for two different road thicknesses.



RAIL TYPE

Provides for the housing of a flat-bottom rail, as shown



Super-Highway RAIL TYPE

Ideal for main trunk roads and airplane runways.



* Completely comprehensive range of types and sizes

* Top quality manufacture ensuring extra long life

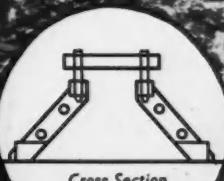
* Right prices

*—that's why
so many
contractors
use*

ACROW

MARGINAL HAUNCH FORM

used in construction of the
London - Yorkshire Motorway
Civil Engineering Contractors:
John Laing and Son Limited
Consulting Engineers:
Sir Owen Williams and Partners



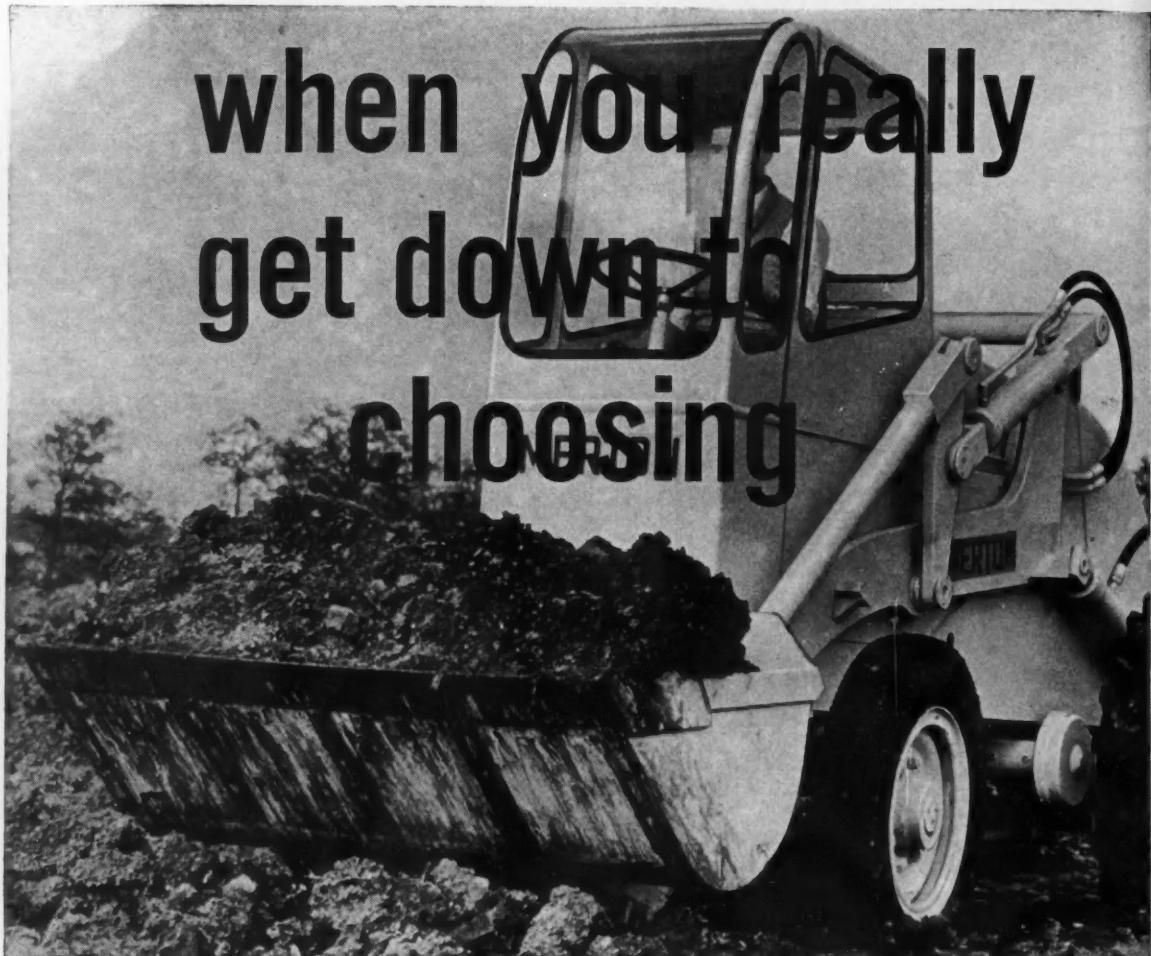
Cross Section
through Marginal
Haunch Form

Acrow (Engineers) Ltd., South Wharf, London, W.2. Tel: AMBassador 3456 (20 lines)

Birmingham Area: Phone Walsall 6085; Bristol Area: Phone Bristol 655244; E. Counties Area: Phone Saffron Walden 2552

Glasgow Area: Phone Bridgeton 1041; Leeds Area: Phone Leeds 76514; Liverpool Area: Phone Aintree 7335; Manchester Area: Phone Deansgate 7054
Newcastle Area: Phone Newcastle 86-9493; Southampton Area: Phone Locks Heath 3021; S. Wales Area: Phone Penarth 57388

when you really
get down to
choosing



A Merton Loader is designed round the driver and the job he has to do—good visibility and easy handling are only two of the Merton plus features—and you make a wise choice too when you go for Merton reliability, performance and easy maintenance.

Front-loaders, overloaders, two-way loaders—the Merton range covers the lot. Real engineering jobs with plenty of thought put into them.

A demonstration is the thing *Let us show you your choice from the Merton range on your own ground, on the job it will have to do.*

see the  range

MERTON ENGINEERING CO LTD Faggs Road • Feltham • Middlesex • Feltham 3045

TA 3132



POST-WAR PROGRESS IN BUILDING TECHNIQUES

Increasing Skill of Management

ACCORDING to Mr. Ronald W. Wates, director of Wates, Ltd., the increase in the skill of management has been the sphere in which the building industry has seen the most outstanding progress since the war.

Mr. Wates, who was addressing the Chartered Auctioneers and Estate Agents' Institute in London last week, said that this growth of management found its focal point in preplanning, which in itself was nothing new, but the thoroughness and intensity with which builders now pre-planned operations during the pre-construction stage had almost given the word a new meaning.

"The programme and progress charts which now adorn our site office walls have grown up from being devices designed to confuse site visitors and are now tools of management as vital as the trowel to the brick layer," he continued. "They symbolise the universal acceptance of the truth that complex operations cannot be executed economically without thorough pre-planning.

"As this thoroughness in pre-planning demonstrates the advance in the skill of management so well, I intend to go into a little more detail by describing briefly what it means to us.

"The task is carried out by a team which consists of our general manager, the area manager who will be responsible for the management of the job from the head office standpoint, the estimators who, having prepared the estimate for the job, have the most detailed knowledge of it up to that time, our chief engineer, our plant manager who will know what is available from our resources and from manufacturers if special equipment is required and, last but not least, our site agent or general foreman, who will be responsible for the day-to-day running of the job.

"The last-named is a most important member of the team, for during the pre-planning period he will be able to visualise the problems presented by the job and by eliminating them wherever possible, he will be able to get the bugs out of the building before construction starts. Difficulties long foreseen can be overcome much more economically at the planning stage than when they present themselves in the form of unpleasant surprises on the job with a lot of men standing about wondering how you are going to solve them.

First Task

"The first task that confronts this team is to find out what we don't know about the building and that generally is plenty. For frequently, at the time when the contract is placed with us, a lot of drawings remain to be prepared. This is due mainly to the fact that many consents have to be obtained prior to the contract and that it is, therefore, too hazardous for the architect to have provided, by that time, more drawings than are necessary, as the local authority's requirements are in many cases unpredictable.

"In addition, of course, the architect has frequently been preoccupied with satisfying his clients' requirements which themselves may have been modified and changed quite a lot during the design period. I am quite certain that one of the hidden and often avoidable costs of building is in the difficulty which faces the architect in finding out what it is the client really wants.

"However, in general, the team's objective is to assess the present stage of design and in the light of this assessment to decide upon the methods that will be employed. Then, having settled upon the building method, to work out a detailed programme showing each stage of the building right through from excavation to handover and, from this programme, to make sure that drawings, materials, equipment, plant and

men will flow smoothly on to the site in accordance with this preconceived programme.

"When this team has finished its work, they will know, so far as the drawings permit, exactly in what way they will construct the building and to what degree the work can be mechanised. This implies that they will know what machinery and equipment will be required, what labour forces will be necessary and the number of man-hours that will be consumed in each operation. They will have advised the architect and engineer of the dates by which the various detailed drawings will be required and when the contracts must be placed for the lifts, heating equipment and all the other many nominated specialist sub-contractor items that are beyond the builders' direct control.

Utmost Economy Aim

"All this pre-planning is aimed at securing the utmost economy once the building work starts and in ensuring that the maximum speed of construction is achieved from start to finish with the lowest possible labour force. This objective is only possible if the right materials coincide with the right labour and the right plant at the right time—no small task.

"This brings me to the increase in the skill of the managers themselves. The selection of building techniques for each job, the problems of plant selection and the resolution of the thousand and one other questions that present themselves, the control of an ever-growing team of specialist sub-contractors and the management of faster and faster building jobs all demand a team of skilled, highly imaginative, intelligent and flexible technicians.

"It has often been difficult to meet these demands, but I am glad to say that the post-war years have seen the introduction of many new training schemes by the technical colleges, trade associations and other bodies. The various courses are annually growing in number and popularity. They have supplemented our own internal training programmes and have been of enormous benefit. It takes eight or 10 years for the fruits of a management training programme to be reaped and with the perpetual need for increasing skill, whilst I cannot say that we are over the hump, I can at least say that the future is brighter than ever.

Design

"Having touched on the increase in the skill of management and managers as demonstrated by pre-planning I want now to turn to the growing interplay that is emerging between the functions of design and construction. The importance of this cannot be over-emphasised. The gulf that existed between architects, engineers and builders before the war may have been all right when a six-storey building was considered high, but is certainly not all right today when the much more complex buildings of 15, 20 and more storeys in height are considered usual.

"It is one of the peculiar features of the building industry that, more often than not, the design of a project is completed without reference to the organisation that is going to build it. As a consequence, in too many cases, the contractor has little or no opportunity of making any suggestions about such matters as methods of construction, planning, cost control or the appointment of specialist sub-contractors although his experience in these matters may be invaluable.

"As things are, with much of our work obtained by competitive tender on a bill of quantities system, at the time of the acceptance of our tender we often have only a sketchy idea of the buildings we have committed ourselves to construct.

When we remember that planning, which includes such fundamentals as the selection of plant and, in the case of tall buildings, lifting plant in particular, it is clear that this situation produces many difficulties. With design and construction handled separately, it is often too late at the time of the placing of the contract, to integrate the two sufficiently well to secure the maximum building economy.

"An elementary example of this arises in those cases where a tower-crane is to be employed. If once it is decided to lift something, to reduce time and cost, it obviously pays to lift the largest sized component that is possible within the capacity of the crane. In turn this demands careful integration of precast concrete into the design. Especially is this the case today when reinforced concrete has largely superseded structural steel on grounds of economy and speed. The earliest collaboration, therefore, between designer and builder can often save the owner a great deal of money.

"Undoubtedly there is room for much progress in this sphere of designer/constructor collaboration. Many people on all sides of the industry are coming to realise that there are costly shortcomings in our present practice of splendid isolation. Much thought is being given to the problem, and recent years have produced an increasing number of examples where the building owner has obtained all the benefits of competition between firms of equal ability and at the same time has secured the advantages of complete contractor collaboration from the design stage through to completion.

Plant

"Having dealt only too briefly with the integration of design and construction, I now turn to the third salient feature of recent years—namely, the improvements in builders' plant. Enormous progress has been made, but by far the most striking has been in the sphere of materials handling. This is not surprising, of course, when we remember that one of the early post-war building studies pointed out that 70 per cent. of the labour cost in building was attributed at that time to either the lifting or moving of materials.

"Undoubtedly the greatest and most dramatic advance has been in the introduction of the tower crane—a tool which, by its domination of the London skyline, is becoming very familiar to the general public.

Conclusion

"Looking back over the past 10 years, I am certain that it was in response to the challenge of labour shortages and an inadequate supply of materials, that the building industry looked first to its own organisation and management. Profiting by its war-time experiences it has in fact developed a considerably higher skill of management than existed 10 or 15 years ago. In particular we have learned a great deal about the technique of pre-planning and, as a consequence of this, we have speeded up construction times and are able to maintain a much closer control of progress against schedule than ever before. The intense study that has been given to the art of management has brought considerable rewards and has produced one of the most significant features of post-war progress.

"We have learned, too, that there is tremendous scope in a much closer integration of design and construction methods. Admittedly, I have dealt almost entirely with multi-storey buildings and the impact of the tower crane, but the field is a wide one and I think it is now seen very clearly that in the ideal condition there should be complete team-work from the very commencement.

(Concluded on page 861)

NOTTINGHAMSHIRE ROAD MAINTENANCE SEVERELY CURTAILED

County Surveyor's Annual Report

IN his recently published report for 1958/59, Mr. Reginald A. Kidd, Nottinghamshire county surveyor, states that the grant allocation by the Ministry of Transport for maintenance and minor improvement for the financial year 1957/58 was substantially greater than the amounts made available in previous years. This led the council to hope that with the continued allotment of grant money of the same order, at least existing standards could be preserved.

The estimates for the year 1958/59 were prepared accordingly, says Mr. Kidd, but the grant allotted to classified County roads for that year was, in fact, almost £24,000 less than in the previous financial year, the smaller allocation being explained by the "pressing need to limit expenditure in the drive against inflation, and in order to prevent any curtailment of the programme of new construction and major improvement." The allocation was £297,000, representing a gross estimate of £494,666. On trunk roads, however, an amount of £175,000 was authorised, being £4,700 greater than that for 1957/58. As a result of the reduced allocation of grant money, the works programme approved by the Council had to be severely curtailed and much essential work deferred.

Most Discouraging

"When one considers the enormous growth of road traffic over the past few years and the rate at which it is anticipated it will increase during the next decade, any restriction of expenditure on maintenance is most discouraging," says Mr. Kidd. "Even with the completion of the Government's road development programme now in hand, and of those schemes forming part of the extended programme, the existing roads must continue to carry an increasing load of traffic far beyond their capacity. Industry generally is handicapped by an inadequate highway system; the resulting congestion and delays, and a shameful accident record, are not insignificant factors contributing to cost inflation, insidious in its action and damaging to the economic prosperity of the nation.

"Schemes of minor improvement carried

out under the Classification grant might often be more effective if they could be extended beyond the limits of the highway, but under the normal grant regulations of the Ministry of Transport work of this nature is not eligible for Classification grant; it must be the subject of a special authorisation as a major improvement. The Ministry have, however, relaxed this restrictive regulation to some degree and certain schemes can be considered for a special grant to cover only the element of major improvement, leaving the whole of the roadworks to be charged to the Classification account. Unfortunately, the Ministry insist that the cost of the major improvement element shall be met by a corresponding reduction in the Classification grant. This relaxation allows scope for the initiation of valuable schemes which might otherwise remain unfulfilled for many years, but inroads on the restricted funds made available for maintenance can be ill afforded."

Following are further extracts from Mr. Kidd's report:

Resurfacing

The mileage of roads surfaced with graded materials was 35.35 miles, which compares favourably with previous years. Thin carpeting, however, was carried out on only 16.18 miles of road, and this is well below the average of the last few years (for example, in 1957/58 over 40 miles of road were dealt with).

The effective life of a road surface can be prolonged appreciably by judicious surfacing, and the development of the thin asphalt carpet has provided an economical method of treatment combining an excellent running surface with a reasonably long life. Therefore, it is greatly to be regretted that lack of funds so severely limits the opportunities to extend the use of this type of thin carpeting. The resurfacing programme tentatively planned for 1958/59 had to be drastically revised, and in many places where thin carpets were intended surface dressing had to be substituted.

Surface Dressing

Whilst the length of roads surface dressed (151.42 miles) was greater by 13.98

miles than that dealt with in 1957/58, it is still very much less than the average of recent years and the general downward trend of this method of surface treatment continues. In fact, but for lack of funds compelling a reduction in the resurfacing programme with a corresponding increase in surface dressing, the length of roads surface dressed would have shown a considerable reduction on previous years.

Plant

During the period under review the following items were added to the heavy plant stock: Two Ferguson mowers; two 10/7 concrete mixers; three 2/3-ton S.W.B. motor lorries (diesel); three Markham trailers; seven Ferguson tractors; eight Ferguson loading shovels; five 28in. vibratory rollers; one petrol roller under three tons; one diesel roller 8-10 tons; one diesel roller under three tons; two Atkinson gritters; two Rolba snow blowers; three snow ploughs—carriageway; three low loading trailers; one Bray loading shovel; two motor scythes.

Labour Force

The maximum number of men employed by the Department was 496 and the minimum was 464, compared with a maximum of 494 and a minimum of 454 during 1957/58. Out of the total number of men employed 38 or 7.9 per cent. were over the age of 65 years, compared with 44, or 9.2 per cent., during 1957/58.

The improved situation reported last year was maintained and the labour situation remained reasonably stable. The services of certain selected employees of retiring age were extended, but to a slightly reduced extent consistent with the easing of the labour situation generally.

General

At the beginning of this report reference is made to the reduction of almost £24,000 in the grant allocated for the maintenance and minor improvement of classified County roads and the consequent curtailment of the works programme approved by the County Council in the Budget. It was inevitable that the cut in maintenance expenditure should be met by deferment of a number of carriageway resurfacing proposals. In consequence this year only 51½ miles of road were resurfaced which is the lowest figure for any year since 1950/51. This mileage can be compared with a figure of 73 miles in the previous year and 84 miles, the best ever, which was achieved in 1955/56.

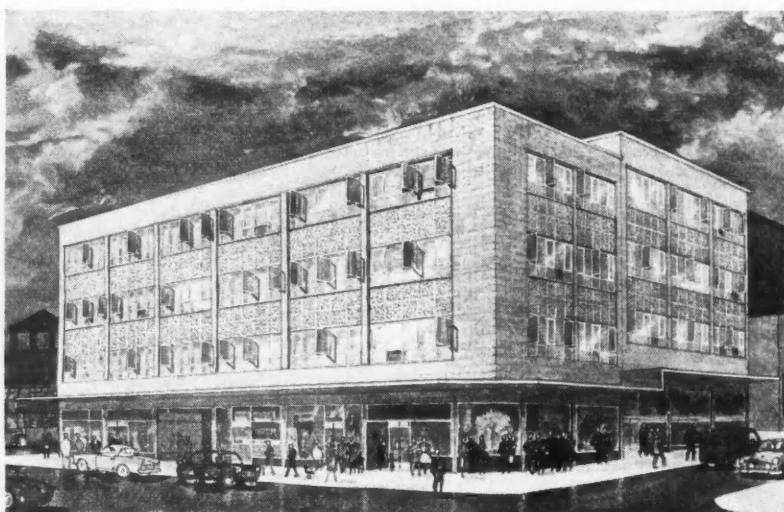
That is the dark side of the picture, but if we turn to major improvements the picture is very much brighter. Last year I was able to report a 50 per cent. increase in the volume of major improvement works, the total expenditure amounting to £325,000, approximately two-thirds of the work being carried out by contract. During the year under review this rate of progress on major improvement works has been substantially maintained, the total expenditure being very nearly £300,000. No less than 37 improvement schemes were in progress during the year and the value of the major improvement work carried out by the Department's direct labour force was £160,000.

LIGHTING CONFERENCE FOR ARCHITECTS

Organised by the British Lighting Council, a one-day conference for architects is to be held at the Royal Institute of British Architects on April 27, 1960.

The theme will be "Is Daylighting Really Necessary," and the speakers will include Alister MacDonald, F.R.I.B.A., W. R. Stevens, B.Sc., M.I.E.E., F.I.E.S., and Dr. F. W. Floyd, consultant physiologist, Post Office. The chairman for the first session will be Sir Thomas Bennett, F.R.I.B.A.

Tickets for the conference may be obtained from the Secretary, British Lighting Council, 16-18 Lancaster Place, London, W.C.2.



An artist's impression of the new block of shops and offices now being built on the site of the recently demolished Old Palace Theatre, Halifax. The development has been designed by Richard Pickles and Partner, Halifax, for O. and C. Estates, Ltd., and is being erected by William Townson and Sons, Ltd., Bolton. More than a third of the ground floor shopping area is to be used as a supermarket, and the upper structure of offices will be U-shaped to permit the incorporation of a light well

BREWERY BUILDING FEATURES TWO VARIETIES OF SHELL CONCRETE ROOF

A NEW bottling department, costing approximately £350,000, has recently been completed for Wilsons Brewery, Ltd., at Newton Heath, Manchester.

The building consists of three main structural sections separated by expansion joints—the processing and tank storage block, the bottling hall and offices and the loading bay.

The site was provided with a number of concrete roads; these consist of an 8in. thick concrete slab laid on a 9in. thick bed of hardcore.

Tank Storage and Processing Block

The storage and processing block is a single-storey flat roofed structure 225ft. long by 115ft. wide, the roof being designed for 4cwt. per sq. ft. superimposed load to cater for possible future developments.

The columns, which rest on bases 8ft. 6in. below floor level, are arranged on an 18ft. by 21ft. grid. The in-situ concrete main beams span 18ft. and the precast concrete secondary beams which span 21ft. rest on the main beams at 6ft. intervals.

Expansion joints with double rows of columns and beams divide the 225ft. length into three.

The floors are 6in. thick in-situ concrete slabs surfaced with asphalt. The concrete roof slab is also finished with an asphalt surfacing beneath which is a layer of vermiculite for insulation purposes.

A small office block, 97ft. long and 30ft. wide, has been built on the roof adjacent to the bottling hall gable wall.

Bottling Hall and Offices

The bottling hall consists of two column free halls 198ft. long by 85ft. wide, each to contain a complete plant layout. The halls are separated by a central aisle formed by two rows of columns 15ft. apart. This aisle is for the use of fork-lift trucks.

The floors throughout the bottling room are 6in. thick in-situ concrete with an asphalt surfacing. Each of the halls has a concrete barrel roof with a clear headroom of 29ft. at the centre of each vault. The roofs are supported on arch ribs, at 23ft. centres; these ribs are 5ft. by 1ft. in section

and they are prestressed on the Magnel-Blaton system.

The shells are 2½in. thick and are built to an internal radius of 65ft. Roof light openings, which have been given insulation by the use of lay lights, are provided part way up the slopes and the shells are insulated with vermiculite screed and covered with felt roofing.

tion and the use of insulating material on the roofs.

Loading Bay

The loading bay is 87ft. 6in. wide by 250ft. long. It is roofed by seven cambered concrete shells of 28ft. 9in. chord length, supported by prestressed edge beams 36in. by 6½in. in section.



One of the bottling halls

Single-storey offices and workshops are arranged along each side of the bottling hall. These are of beam and column construction and are flat roofed.

The process gives rise to a certain amount of steam and it is partly for this reason that the general shape of the bottling hall roof was chosen and was also the reason for a plenum system of ventilation.

The shells are 2½in. thick and built to an internal radius of 25ft. Openings 6ft. wide by 45ft. long are provided in the shell crowns for sky lighting. The shells were insulated with vermiculite screed and covered with felt roofing.

The floor of the loading bay is of 6in. thick in-situ concrete with a 2in. granolithic surface.

General contractors for the scheme were Holst and Co., Ltd., Manchester.



Interior of the tank storage and processing block

SAFETY FILM PRODUCED BY BIRMINGHAM GROUP

A 16mm. film in colour, devoted to safety in the building industry, has been produced for the Birmingham and District Industrial Safety Group.

Entitled "This Nettle, Danger," the film is of a documentary nature with a commentary by Eamonn Andrews. It includes scenes of a site where safety is a first consideration, followed by another where accident prevention is conspicuous by its absence. The visit to this second site is climaxed by an accident, consisting of a realistic fall of an operative from high scaffolding with all its attendant tragedy.

Copies of the film are available from the Birmingham and District Industrial Safety Group, 71 Broad Street, Birmingham, 15.

CHARTERED SURVEYORS' ANNUAL DINNER

The Secretary of State for Foreign Affairs, Mr. Selwyn Lloyd, will be the principal guest at the annual dinner of the Royal Institution of Chartered Surveyors which will be held at Grosvenor House, London, W.1, on Tuesday, March 8.

£36M. CAR PLANTS AT MERSEYSIDE

Ford and Standard Proposals

PROPOSALS have been announced by Ford Motor Co., Ltd., and Standard-Triumph International to spend millions of pounds on new factories and developments at Merseyside.

Marking the beginning of a further substantial expansion of car production, Ford will erect a new plant, to produce 200,000 cars annually, on a site at Halewood, near Liverpool.

The works will consist of an integrated car body plant, including stamping, body assembly, paint, trim and final assembly operations, and will employ about 8,000 people. In the first instance factory buildings exceeding 2,000,000 sq. ft. in area will be erected and equipped at a cost of more than £25m., and as these first stages are completed, there will be further developments.

The major part of an £18m. expansion scheme to be carried out by Standard-Triumph will be located at Speke, where it is planned to erect a new car body plant estimated to cost £7m. This factory will have an area of 300,000 sq. ft. and will be situated on a 104-acre site alongside the press shop buildings of Hall Engineering which are currently being acquired by Standard. A 250,000 sq. ft. extension will be erected to these press shop facilities, and a further £4m. will be spent on progressive development of the Merseyside site during the next three years.

The company also proposes large expenditures on the provision of new plant and equipment at existing factories and rebuilding of administrative buildings in the Midlands.

Rootes' Scottish Factory

A factory designed to employ about 3,500 workers is expected to be erected at Linwood, near Paisley, for the Rootes Group. The scheme is still subject to further negotiations with Government departments and other bodies.

ARCHITECTURAL COMPETITION FOR DUNBARTON OFFICES

Dunbarton County Council are holding an open architectural competition for the design of new county offices to be built at Crosslet.

There will be two stages in the competition, the six successful competitors in the first stage taking part in the second. Each of these six will receive £400, and the premium for the design placed first will be £1,500.

The assessors are Mr. F. R. Wylie, F.R.I.B.A., Glasgow; Prof. J. H. Napper, F.R.I.B.A., Newcastle upon Tyne; and Mr. James Mottram, A.R.I.B.A., Edinburgh, President of the Royal Incorporation of Architects in Scotland.

INCREASES IN BUILDING WAGES

The National Joint Council for the Building Industry have approved a recommendation that the standard rate for craftsmen in the building industry should be increased by 2½d. per hour and the rate for labourers by 1½d. per hour. The Joint Council agreed to recommend to its constituent employer and operative bodies that the increases should come into effect on Monday, April 18.

B.R.T.A. DIRECTOR TO BE APPOINTED

The British Road Tar Association is to appoint a full-time director. Applications for the position are invited by the Association in an official announcement appearing elsewhere in this issue.

TENDERS SOON FOR £500,000 BIRMINGHAM UNDERPASS

TENDERS will be advertised shortly for the construction of a new underpass road, 42ft. wide and 1,200ft. long, on the northern outskirts of Birmingham, to carry north-south traffic on A.34 underneath the east-west traffic on the Outer Ring Road. The surface of the underpass road will be heated to prevent the vehicles slipping on the gradients, which are 1-20 at the south end and 1-15 at the north end.

On either side of the underpass road will be a 20ft. carriageway at the existing street level, for local traffic. These will be connected to the Outer Ring Road by means of a roundabout passing over the underpass road, and a system of pedestrian subways will be provided underneath the roundabout.

At the northern end of the works, the underpass road and the two carriageways will pass over the railway tracks of the London Midland Region at Perry Barr Station by means of a widened railway bridge. This portion of the works will embody a new booking office for the station, and British Railways are proposing to develop each side of the bridge with a row of shops.

The total cost of the civil engineering works will be about £500,000, part of which will be met by a grant from the Ministry of Transport. The works will be carried out under the authority of Sir Herbert J. Manzoni, C.B.E., M.I.C.E., city engineer and surveyor of Birmingham, and of Mr. A. N. Butland, M.I.C.E., chief civil engineer of the London Midland Region, British Railways. Sir William Halcrow and Partners are the consulting engineers.

TAY ROAD BRIDGE WILL COST ABOUT £4M.

Tenders for the borings for the proposed Tay Road Bridge are due in this month and the results of the borings are expected about mid-May.

A spokesman of the consulting engineers, F. A. MacDonald and Partners, said recently that a full report of the scheme, including the bridge's line and cost, should be available for Parliamentary approval in the spring, after which it would be possible to start work.

The bridge, which will be 7,400ft. long and multi-spanned, is now estimated to cost about £4m.-£1m. more than the original estimate.

COMMISSION TO STUDY BRIGHTON SCHEMES

Three schemes submitted to Brighton Borough Council for redevelopment of part of the town's sea front are to be studied by the Royal Fine Art Commission, before a final selection is made by the town planning committee.

A total of 16 schemes were put forward for redevelopment of the 11½-acre site at the foot of West Street, from which the three schemes were short listed. The planning committee have been authorised to begin negotiations with the three developers—Bernard Sunley Investment Trust, Ltd.; the Taylor Woodrow Group; and Copthall Holdings, Ltd.

MUNICIPALS' BIENNIAL SCHOOL VENUE CHANGED

Because of the great number of applications, the venue of the Institution of Municipal Engineers' Biennial Spring School has been changed from Holborn Town Hall to the Connaught Rooms, Great Queen Street, London, W.C.2.

The school, to be held on March 2 to 4, has been organised by the Metropolitan, Eastern, South-Eastern and South Midland Districts of the Institution.

Late Construction News

NORFOLK BRIDGE TENDERS.—Seventeen tenders, ranging from £96,149 to £144,620 have been submitted to Norfolk C.C. for construction of the Haddiscoe Cut Bridge on the A.143. The lowest is by A. Monk and Co., Ltd., Stamford, Lincs. The bridge will be a three-span steel and concrete structure about 220ft. long by 37ft. wide. Included in the contract will be deep piling, approach embankments up to 30ft. depth and 600yd. long, roadworks, river works and demolition of a bascule bridge.

BLACKPOOL FLATS.—Blackpool B.C. have accepted the £109,300 tender of R. Fielding and Son (Builders), Ltd., Stanhope Road, Blackpool, for erection of 48 one-bedroom flats and 36 bed-sitting room flats at Mereside estate.

"NO FINES" HOUSES.—A contract worth £206,978 has been placed with George Wimpey and Co., Ltd., to build 118 "No Fines" houses for Pontypridd U.D.C.

\$5M. CANADIAN OFFICES.—Taylor Woodrow (Canada), Ltd., have been awarded a \$5m. contract to build a new head office near Toronto, for Fords of Canada. The building will be seven storeys high, with a floor area of over 180,000 sq. ft. Allward and Gouinlock, Toronto, are the architects.

£170,000 WAREHOUSE.—A £170,000 warehouse is to be built at Wibsey, Yorks., for Grattan Warehouses, Ltd., by George Wimpey and Co., Ltd.

Basildon Housing.—Tenders from selected contractors are due in early next month for the erection of 306 dwellings at the Vange housing areas 5a and 5b, for Basildon Development Corporation. Plans are by William Crabtree, 8 Robert Adam Street, London, W.I., and quantities by E. C. Harris and Partners, Lynton House, Tavistock Square, London, W.C.1.

15-STORY FLATS.—Subject to Ministry approval, Newcastle upon Tyne City Council are to accept the £1,358,715 tender of George Wimpey and Co., Ltd., for building 413 two-bedroom flats and 217 one-bedroom flats. The flats will be contained in one 15-storey block at Pottery Bank and six blocks of the same height at Scotswood Road (Hawes Street) redevelopment area. Completion is scheduled within 22 months.

CWMBRAN SCHOOL TENDERS.—Monmouthshire C.C. are inviting tenders from a short list, due in at the end of this month, for the erection of an infants' school at St. Dials, Cwmbran. Plans are by K. L. Davies and W. E. Hole, 41 High Street, Newport, and the quantity surveyors are W. T. Hills and Co., 3 Castle Street, Cardiff.

THAMES LOCK RECONSTRUCTION.—The River Thames lock at Brentford, Middx., is to be reconstructed, for British Transport Waterways, by John Howard and Co., Ltd., at a cost of £100,000. The work involves constructing a new lock and then rebuilding the old one. It will be carried out in tidal water, with a rise and fall of 16ft.

MIDDLESEX SCHOOL.—The tender of C. J. Sims, Ltd., 2 Victoria Street, London, S.W.1, at £140,800, has been recommended for the erection of a Roman Catholic secondary school at Park Road, Ashford, Middx.

LONDON FLATS AND OFFICES.—Bids are due in shortly for the erection of a block of flats and offices on a site at 35-38 Portman Square, 11-15 Portman Street and 28-30 Portman Mews South, London, W.I., for Portman Square Properties, Ltd. The architects are Ronald Ward and Partners, 29 Chesham Place, London, S.W.1, and the quantity surveyors, Veale and Sanders, 19 Hanover Square, London, W.I.

ERNEST DOE ADVERTISEMENT

It is regretted that in the advertisement of Ernest Doe and Sons, Ltd., appearing on page 803 of this issue, the title of the public works contractors is wrongly given as Flynn Excavators, Ltd. This should, of course, read Flynn Excavations, Ltd.

HEXAGONAL THEATRE TO BE BUILT AT CHICHESTER

Reinforced Concrete Structure Will Cost £70,000

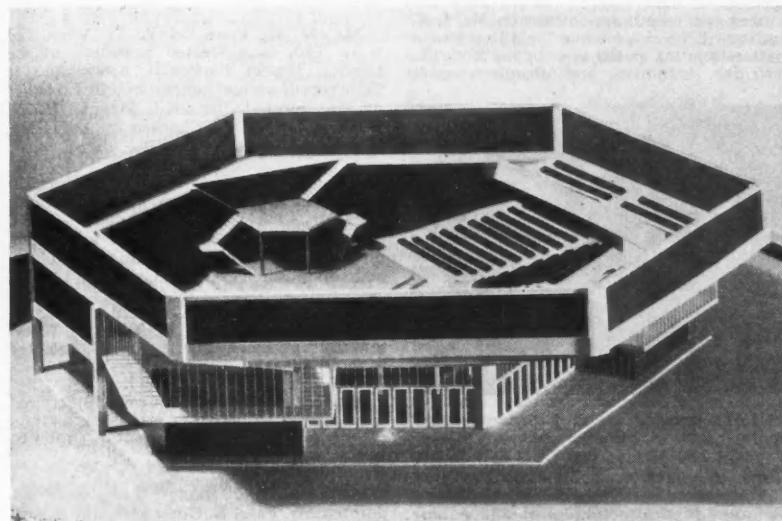
CHICHESTER City Council, at their recent meeting, approved the granting on lease of a site at Oaklands Park, on the outskirts of the city, to a newly formed Trust for construction of a festival theatre.

The Trust—the Chichester Festival Theatre Trust—is launching an appeal for £70,000 which, it is estimated, will cover the cost of erection of the building, together with architectural fees, etc. If the response to the appeal is good it is hoped to start work in May and have the building completed by the early summer of 1961.

The architects for the project are Phillip Powell and Hidago Moya, 30 Great Smith

Street, London, S.W.1. Their design for the theatre, which will seat about 1,500, is based on a recent movement in favour of the return to the character of the Elizabethan theatre, where the audience virtually encompassed the players and where the stage was of a more simple nature than the modern proscenium stage.

Consequently a hexagonal-shaped building has been evolved, measuring 117 ft. across and about 34 ft. high to the eaves. The aim has been to express as clearly as possible the internal planning and design of the building; hence the tiered auditorium encompassing the stage is clearly seen by showing its underside raised on slender columns with a glassed-in space below



A model of the proposed theatre

PRESTRESSED DEVELOPMENT GROUP'S COUNCIL ELECTIONS

THE eleventh annual general meeting of the Prestressed Concrete Development Group was held recently at the Institution of Civil Engineers.

The results of elections to the Council of the Group were announced at the meeting and the Council for 1960 will be as follows:

President—C. W. Hamilton (McCall and Co. (Sheffield), Ltd.); vice-president—A. J. Harris (A. J. and J. D. Harris); immediate past-president—W. B. Sykes.

Engineers—D. A. Andrews (South-Eastern Gas Board); F. M. Bowen (Scott and Wilson, Kirkpatrick and Partners); and A. Goldstein (R. Travers Morgan and Partners).

Architects—A. G. Jury (City Architect and Planning Officer, Glasgow); A. Kirkwood Dodds (The Pre-Stressed Concrete Associates); and E. D. Mills (Edward D. Mills and Partners).

Specialist engineers—R. T. Betts (McCall and Co. (Sheffield), Ltd.); R. F. T. Kingsbury (Stressed Concrete Design, Ltd.); and J. N. Lowe (The Pre-Stressed Concrete Associates).

Contractors—J. W. A. Ager (Richard Costain, Ltd.); J. A. Derrington (Sir Robert McAlpine and Sons, Ltd.); and R. B. Hill (Demolition and Construction Co., Ltd.).

Product manufacturers—J. Barratt (Concrete, Ltd.); S. V. Gardner (Anglian Build-

ing Products, Ltd.); and A. G. W. Martin (The London Ferro-Concrete Co., Ltd.).

Manufacturers of prestressing and reinforcing steel—C. F. Brereton (Richard Johnson and Nephew, Ltd.); K. G. Hann (The Somerset Wire Company); and K. W. Longbottom (British Ropes, Ltd.).

Chief technical officer—A. W. Hill (Cement and Concrete Association); secretary—P. Gooding (Cement and Concrete Association).

INSTITUTE OF BUILDING ESTIMATORS

The intermediate and final examinations of the Institute of Building Estimators will this year be held on Thursday, Friday and Saturday, May 26, 27 and 28, 1960, at the Royal Society of Health, 90 Buckingham Palace Road, London, S.W.1.

Applications to become registered students and to sit the examinations should be made to the headquarters of the Institute, 10 Cromwell Place, London, S.W.7, before April 30, 1960.

Have you completed and posted your Readership Survey postcard?

forming the entrance and foyer. The main roof is of low pitch and is not visible from the ground, but the centre of the roof, being of a steeper pitch is visible. For structural and ventilation reasons, it is in the form of a lantern.

Initially the building is being constructed as cheaply as possible, and the promoters' intention is subsequently to improve the building if necessary and to add to it. For example, it is envisaged that the restaurant, if any, bars and changing rooms might in the first instance be housed in tents, which would be taken down at the end of each season. In later years, the intention would be to replace these with permanent buildings, extending westwards from the base of the auditorium.

The supporting framework of the building consists of reinforced concrete columns, with a permanent, light-coloured, exposed aggregate finish, giving a stone colour and texture requiring no maintenance. The infilling walls are of glass in timber frames, or where solid, of rendered building blocks. These infilling panels will be painted a dark neutral colour, or if more money is available at a later date will be finished in a maintenance-free material such as bronze sheeting.

The visible underside of the tiered seating is of precast concrete, painted a light colour. The main roof surface, not visible from the ground is of built-up roofing felt. A light-coloured mineral roofing felt will be used for the lantern forming the centre of the roof, but this might be replaced later with metal sheeting such as matt anodised aluminium.

The roof structure consists of three steel cables, stressed to about 140 tons each, supported on the exterior reinforced concrete frame of the auditorium and supporting a steel lattice ring beam over the middle of the auditorium. Light steel-work and timber form the infilling of the roof, the timber being exposed internally. The overhanging portion of the auditorium is partially supported by the roof cables. Other consultants involved in the project are: Charles Weiss and Partners, structural engineers, 1 Wandsworth Road, London, S.W.8; Peter Jay and Partners, electrical engineers, 16 Gloucester Place, London, W.1; Davis, Belfield and Everest, quantity surveyors, 9 Ashley Place, London, S.W.1.

ANNUAL REGIONAL BUILDING CONFERENCE

"Building and Society" is the title given to the 11th Annual Regional Building Conference to be held at Reading on June 11, by the South Regional Council for Further Education.

Subject of the morning session will be "The Influence of Society on Building," and of the afternoon session "The Influence of Building on Society."

Also at Reading on the same day the sixth Annual Regional Building Crafts Competitions for apprentices attending technical colleges in the Southern Region will be organised in the following subjects: Brickwork, carpentry and joinery, painting and decorating, plastering and plumbing, and a special competition for woodcutting machinists.

276,674 HOUSES COMPLETED LAST YEAR

During the year 1959, 276,674 permanent houses were completed in Great Britain (compared with 273,695 in the same period of 1958), of which local authorities were responsible for 122,165 and private builders for 150,708.

Houses under construction at December 31, 1959, totalled 266,632—local authorities 148,663 and private builders 112,656.

Men and Movements

WATES, Ltd., have announced the appointment of **Mr. Norman Wakefield** to the position of contracts manager, to be specially responsible for Wates contracts undertaken for Span Developments, Ltd. He joined the company in 1946 as an indentured student, and has been working as a site agent for the last four years. A second contracts manager has also been appointed. He is **Mr. Frank Childs**, L.I.O.B., who has been the deputy to the chief quantity surveyor and estimator for several years. Mr. Childs joined the estimating department of the company in 1946.



N. WAKEFIELD

Mr. P. B. Maufe, chairman of The Rugby Portland Cement Co., Ltd., has retired from the board after over 50 years' service with the company. His brother, **Lieut.-Col. F. W. B. Maufe**, M.C., T.D., has succeeded him in that office. **Mr. Anthony Sharpley**, **Mr. Oliver Marriott** and **Mr. Ambrose Maufe**, all of whom have been with the company in senior executive positions for a number of years, have been appointed directors.

Sir Walter Worboys has been appointed a director of the Associated Portland Cement Manufacturers, Ltd., and British Portland Cement Manufacturers, Ltd.

Mr. R. E. F. Sykes, associate member of the Institution of Works Managers, has been appointed general manager of Griffin and George (Laboratory Construction), Ltd. Mr. Sykes succeeds **Mr. A. E. Lambert**, who has retired from the company.

Mr. T. H. B. Whiting has been appointed to the board of Aveling-Barford, Ltd.

Mr. T. M. Moore, senior representative of Jenson and Nicholson, Ltd., is travelling by air during February, March and April, to British Honduras, British Guiana, Jamaica, Bermuda and other Caribbean Islands.

Mr. G. M. Warren, sales director of Aveling-Barford, Ltd., flew to Canada recently on a week's visit to the company's Toronto subsidiary, and for talks with Canadian distributors. The post of European sales manager for the Aveling-Barford group of companies has been filled by the appointment of **Mr. J. M. Gifford**, who is already on his first tour in the Scandinavian countries. Mr. Gifford joined Aveling-Barford a year ago.

Mr. G. Fettes Waddington, export manager of Wolf Electric Tools, Ltd., is making an extensive business tour of Australia, arriving by air at Sydney on February 21. Throughout his three months' visit his headquarters will be at Wolf Sales Pty., Ltd., Arthur Street, Homebush, Sydney, an associate company of which he also is a director.

Neale, Wright and Co., Ltd., have announced two recent appointments: **Mr. J. K. Boden** will be responsible for all technical matters relating to the sales of the Tornado cartridge hammers and Bosch electric



J. K. BODEN

E. J. SHURINTON

hammers and accessories. **Mr. E. J. Shurinton** will operate in the East Midlands area as senior sales representative in the full range of contractors plant and equipment.

Causeway Reinforcements, Ltd., have appointed **Mr. T. C. Leach** to be their representative in the five Midland counties for their surface armouring and multi-purpose trestles. The company have also appointed **Mr. C. T. Withy** as their representative in Lancashire and Yorkshire.

Mr. S. R. Woolcock, Fellow of the Institute of Builders, has taken a post with James Drewitt and Son, Ltd., Bournemouth, as contracts supervisor.

Tyresoles, Ltd., have announced the appointment of **Mr. R. Bartram** as manager to take charge of the development of all Tyresoles "off-the-road" services. Mr. Bartram joined the company in 1938 as a sales representative, and after the war became area sales manager, London, later taking the post of personal assistant to the managing director. In 1952 he was appointed a director and sales manager of Tyresoles Services (East Midlands), Ltd.



R. BARTRAM

Mr. W. G. Venn, of W. G. Venn and Sons, Ltd., was elected president of the London Master Plasterers Association at their recent annual general meeting. Other officers elected included **Mr. J. H. G. Wickens**, of E. E. Cheeseman and Sons, Ltd., as vice-president.

Among the passengers recently embarking on the "Queen Mary" for New York were **Mr. Charles S. French**, chairman and managing director of W. and C. French, Ltd., and **Mr. Ambrose Congreve**, chairman of Humphreys and Glasgow, Ltd.

Mercantile Credit Co., Ltd., have announced that **Mr. K. R. Minskip**, representative at Leicester, has been appointed branch manager.

Mr. S. H. Ireland, B.Com., B.Sc., has been appointed assistant managing director of the Consolidated Pneumatic Tool Co., Ltd.

Ransomes and Rapier, Ltd., have appointed **Mr. Peter B. Gorst** assistant general sales manager. Mr. Gorst was previously export manager, and he is succeeded in this post by **Col. E. W. Hadfield**.

The new group projects engineer for the Frederick Braby group of companies is **Mr. Charles N. Freeson**. **Mr. J. F. Nash** has been appointed chief engineer of Auto Diesels, Ltd., a member of the group.



Recent visitors to the United Kingdom were more than 100 overseas distributors for International construction equipment. Their programme included three days of conference sessions at Harrogate, practical demonstrations on the Great Yorkshire Showground, and a tour of International Harvester Company's works at Doncaster. Among the visitors were Mr. Paul Molnar from International Harvester Export Company, Chicago, and Mr. E. Drott, president of Drott Manufacturing Corporation of Wausau

BUILDING RESEARCH STATION

DIGEST No. 131

External Rendered Finishes

NATIONAL Building Studies Bulletin No. 10 is a comprehensive guide to the design, application, performance and repair of external renderings and a British Standard code of practice on the subject is in course of publication. Defects are still common, however, and inspection usually reveals that they result from some transgression of basic principles. The following notes are therefore intended to re-emphasise a few main points with particular reference to new work where a rendering is applied for its appearance or to resist rain penetration.

Appearance

Choice of texture and colour of rendering is not entirely a matter of aesthetics. Some finishes present greater difficulties than others, in obtaining and maintaining a uniform appearance, and the designer needs to know what changes in appearance may occur over the years.

A forecast of the appearance of a particular colour or texture when new can often be formed from trial panels or other buildings finished in the same way, but it is not always possible to examine a building of similar exposure, environment and design, on which a given finish has been exposed for a number of years. Moreover, while appearance is determined by the finishing treatment, choice of finish is not independent of the background material or the protection required.

The main types of finishing treatment are as follows:

Pebble-dash or dry-dash—a rough finish in which small pebbles or crushed stone are thrown on to the freshly applied final coat of mortar and left exposed.

Roughcast, wet-dash, or (Scottish) harling—a finish in which the final coat containing a proportion of fairly coarse aggregate is thrown on as a wet mix and left rough.

Scraped finish—a finish in which the final coat of mortar, when it has stiffened, is scraped with a steel straight-edge, a board studded with nails, or some other form of tool, to give a roughened surface.

Textured finish—a finish having a patterned surface produced by treatment of the freshly applied final coat with various tools.

Smooth (floated) finish—a finish in which the surface is made level and smooth with a float.

Machine-applied finish—a finish in which the final coat is spattered or thrown on by a machine. The roughness of the texture is determined by the material used and the type of machine.

Smooth finishes tend to suffer surface crazing and they may be patchy in appearance because of variations in surface texture that cannot be avoided in floating; they rarely retain a satisfactory appearance. Mixes rich in cement and those containing fine sands increase the risk of crazing, and so does finishing with a steel trowel.

Pebble-dash and roughcast are the least liable to change in appearance over long periods. Scraped finishes and some textured finishes in ordinary grey cement also change very little in appearance.

Dirt from atmospheric pollution shows up more on white and pale coloured finishes than on the natural grey cement finish. Dirt also appears worse on the heavily textured finishes than on the more finely textured and scraped finishes or on the smooth ones. On the other hand, when the design and detailing of the wall is such as to produce rain streaks on the surface, the appearance of smooth finishes is more badly affected than that of textured finishes.

Where atmospheric pollution must be anticipated, the problem is perhaps best resolved by using the darker shades of a fairly lightly scraped or textured finish, with adequate detailing to prevent rain runs. When periodic painting is envisaged, smooth finishes will probably be required and then careful detailing to prevent rain runs is even more important.

A defect that often spoils the appearance of coloured finishes is that due to the formation of a white film of calcium carbonate on the surface (lime bloom), which makes the rendering look as if the colour has faded. The effect is more marked under slow drying conditions than with finishes applied in warm dry weather; it becomes less noticeable with ageing. Subject to the atmospheric conditions mentioned above, it is advisable to use only pale colours on which the white film is less conspicuous.

Protection against rain penetration

A solid wall of bricks or blocks, however impermeable the units themselves may be, is liable to let rain penetrate—mainly through hair cracks between mortar and unit. Dense units may be worse than porous ones. With the more porous units, there is a more uniform absorption into the face of the wall as a whole so that penetration through the wall at the weak points is likely to be less and may in fact occur only under much more severe conditions.

Under normal conditions, a rendered finish of any type, properly applied, and even though porous itself, will prevent moisture passing into the hair cracks. Cracks in the rendering, however, may pass enough water to penetrate the wall. Where conditions are very severe, as where a wall will be exposed to driving rain and wind for long periods, at least the first coat of the rendering should be as rich in cement as the strength of the background will allow (see table); this requirement is satisfied by a continuous spatter dash coat used as the first of three coats.

In exposed coastal areas, the pebble-dash

and roughcast finishing treatments have advantages in shedding water or in distributing it over the surface, but textured or scraped finishes may also be satisfactory.

Whatever the conditions of exposure it is important that the building be properly detailed so that moisture cannot reach the backing; this is particularly important where the backing materials contain salts. The design details which are of particular significance in this respect are as follows:

Eaves protection—a wide eaves greatly reduces the amount of rain falling on a wall, particularly in buildings of one or two storeys.

Parapets—all parapet walls are subject to more severe exposure conditions than the external walls on which they stand. Details for design have already been mentioned in Digests Nos. 11 and 68. Materials used in the construction need careful selection and bricks with a high sulphate content or having a low frost resistance should not be used.

Sills—all sills should have effective drips designed to throw water clear of the wall. This is not only important on the underside of the sill; the ends of the sill also should be carefully detailed to avoid rain streaks on the adjacent wall surface.

Flashings—all cornices, projecting ornamental work and exposed top edges of a rendered wall should be covered with durable flashings to throw the water clear and to prevent it from getting behind the rendering.

Lack of care with any of these items is likely to result at least in the rendering being disfigured by rain streaking, and at worst in the complete failure of the rendered finish.

Exposure conditions can be classified as severe, moderate, or sheltered. Severe conditions are found on hill sites or near the coast or where the buildings project well above their neighbours. Conditions may be regarded as moderate where the walls are partially protected from the weather by overhanging eaves or by other buildings of a similar height; such conditions are usually found in towns and suburban districts. Sheltered conditions obtain in areas of moderately low rainfall where there is also protection similar to that described for moderate conditions.

Mixes for external renderings

The design of a mix for an external rendering should take account of the factors already discussed and the nature of the backing to which it is to be applied.

(Concluded on next page)

MIXES FOR EXTERNAL RENDERINGS

Mix: Type A. 1 part Portland cement: $\frac{1}{2}$ part lime: 4 to $4\frac{1}{2}$ parts sand by volume
 Type B. 1 part Portland cement: 1 part lime: 5 to 6 parts sand by volume
 Type C. 1 part Portland cement: 2 parts lime: 8 to 9 parts sand by volume

Masonry-cement:sand mixes may be used as alternatives to Type B and C mixes; the proportions should be in accordance with the manufacturers' recommendations.

Hydraulic-lime:sand mixes in the proportions 1 part hydraulic lime: 2 to 3 parts sand by volume may be used as alternatives to Type C mix.

Where alternative sand contents are shown for the cement:lime:sand mixes (e.g., 5-6 or 8-9 parts) the higher of the sand contents (e.g., 6 or 9 parts) should be used if the sand is well graded, but the lower sand content (e.g., 5 or 8 parts) should be used if the sand is coarse or uniformly fine.

The mixes indicated in **bold** type are to be preferred in most circumstances. The type richer in cement is to be preferred when it is applied under winter conditions. The mix for a following coat should never be richer in cement than the one to which it is applied.

* Background	Finish	Severe exposure	Undercoats(s)		Final coat	
			Moderate or sheltered exposure	Severe exposure	Moderate or sheltered exposure	Severe exposure
Dense, strong and smooth (a) Moderately strong, porous (b)	Wood-float	A or B	A, B or C (c)	As undercoats		
	Scraped or textured	B	B or C (c)			
	Roughcast	A or B	A or B			
Moderately weak, porous	Dry-dash	A	A			
	Wood-float	B	B or C			
	Scraped or textured	B	B			
No-fines concrete	Roughcast	A or B	A or B			
	Dry-dash	A or B	A or B			
	Wood-float	A or B	A, B or C			
	Scraped or textured	A or B	A, B or C			
	Roughcast	A or B	A or B			
	Dry-dash	A	A			

(a) Spatterdash used to provide a key on dense, strong and smooth backgrounds should consist of 1 part Portland cement: $\frac{1}{2}$ to 2 parts coarse sand by volume.
 (b) Spatterdash used to overcome uneven suction on moderately strong and porous backgrounds should consist of 1 part Portland cement: 2 to 3 parts coarse sand by volume.
 (c) When metal lathing or wire netting is fixed to a dense, strong and smooth background to form a key, the *first* undercoat should not be a Type C mix.

International Construction**AUSTRALIAN ROADS PROGRAMME**

A COMPREHENSIVE road programme, drawn up by the authorities of all Australian states, involves spending hundreds of millions of pounds during the next 10 years.

In New South Wales the Main Roads Department plans to spend more than £A320m. on the construction of at least 1,000 bridges and the widening and strengthening of busy sections of the principal highways.

Victorian authorities propose building duplicated roads on main sections of busy highways, such as the Prince's Highway and the Western Highway. Over ten years the Victorian Government plans to spend more than £A200m. on maintenance and reconstruction work. The Queensland Government's target is more than £A160m.

Widening of main roads in suburban areas of South Australia is one of the major improvements planned in that State. South Australia's estimated expenditure on roads over the next decade is more than £A100m.. Western Australia plans to reconstruct major sections of its vast trunk routes and Tasmania aims to build bitumen surfaces on all gravel roads over the years.

CUBITT ASSOCIATES EXTEND TO WESTERN CANADA

Formation of a subsidiary company in Western Canada has been announced by Anglin-Norcross Corporation, Ltd., the Canadian Associates of Holland & Hannen and Cubitts, Ltd., London.

Based on Vancouver, the new company will operate throughout Canada's Western Provinces, so that Anglin-Norcross can now offer a complete coast to coast construction service.

Mr. J. Eric Harrington is president of Anglin-Norcross Corporation, Ltd. Lord Ashcombe, chairman of the board, is also chairman of Holland & Hannen and Cubitts, Ltd. Mr. W. G. Anglin has been appointed vice-president and general manager of Anglin-Norcross Western, Ltd.

£A22M. OIL REFINERY EXPANSION PROGRAMME

NEW industrial projects in New South Wales costing approximately £A22m. were recently announced by the chairman of the Shell companies in Australia, Mr. J. R. C. Taylor.

The main item in this expenditure will be a new £A17m. catalytic cracking plant, primarily for the production of motor spirit, which is to be erected at Shell's Clyde Refinery. On completion, this new unit will be the biggest of its kind in Australia and one of the biggest in the world.

Mr. Taylor said that the plant will be erected by Australian labour, together with a small number of overseas technical personnel. Australian materials will be used wherever possible.

Associated with the project will be the construction of new port facilities at Gore Bay costing approximately £A1m., as well as a pipeline for pumping oil from Gore Bay to Clyde, a distance of about 12 miles, and part of which will be under water. The pipeline alone is estimated to cost £A800,000.

PUMPING PLANT FOR SOUTH AFRICA

A contract for high-lift pumping plant, to be installed in extensions to the Riverton pumping station of the Municipality of Kimberley, South Africa, has been awarded to W. H. Allen, Sons and Co., Ltd. Queens Engineering Works, Bedford, through their agents, Dowson and Dobson, Ltd., Johannesburg.

The plant comprises an 18in./16in. horizontal spindle, three-stage, double-suction series pump driven by a 1,250-h.p. electric motor, together with switchgear, valves and pipework.

Taylor Woodrow (Nigeria), Ltd., have been awarded a contract valued at over £200,000 to resurface two miles of the Marina promenade, Lagos, and to provide seven lay-bys, for the parking of about 300 cars.

TORONTO OFFICES COMPLETED AHEAD OF SCHEDULE

A \$2m. 12-storey office block, 801 Bay Street, in the centre of Toronto, has recently been completed 10 weeks ahead of schedule by Taylor Woodrow (Canada), Ltd.

Work took just over 12 months and, from the first to the twelfth floors, a rate of a floor a week was maintained, mainly through a severe winter (internally heated polythene envelopes were used to protect the working areas).

The photograph shows a view of the main entrance. The building is of reinforced concrete. The structural columns are faced with precast stone of exposed aggregate of fine texture. Installations include a high velocity air-conditioning system and there is both a separate and a basement garage.

The architects were Peter Dickinson Associates; mechanical engineers, Frost Granek and Associates; structural engineers, M. S. Yolles Associates, all of Canada.



(Concluded from previous page)

For this purpose solid background materials may be classified as follows:

Dense, strong and smooth materials, which have low porosity, little suction, and surfaces that afford no mechanical key (for example, dense clay bricks or blocks or dense concrete).

Moderately strong and porous materials, which have relatively high suction and generally good mechanical key (most bricks and blocks and some medium-density concretes).

Moderately weak and porous materials such as lightweight concretes, aerated concretes and some bricks of relatively low strength. With these it is particularly important that the rendering should be weaker than the background.

No-fines concrete forms a class by itself; it provides an efficient mechanical key for rendering, and the absence of capillary paths avoids trouble arising from excessive suction.

The table gives types of mix recommended for the various types of finish, exposure conditions and background.

Proprietary mixes and aerated ("plasticised") mortars

Factory-made rendering mixes, requiring only the addition of water on the site, are available for undercoats and finishing coats. These mixes, which should preferably correspond to the mixes given in the table for the relevant conditions, should be used in accordance with the manufacturers' instructions. One advantage of their use, especially for final coats, is that it is easier to obtain uniformity of colour and texture than with mixes prepared on the site.

Rendering mixes containing proprietary masonry cement, to which sand is added on the site, can be regarded as alternatives to the 1:1:5-6 and 1:2:8-9 cement:lime:sand mixes. The manufacturers of masonry cements suggest the proportions of sand to be added, and their instructions should be followed generally.

There is widespread use of aerating agents or "mortar plasticisers" in brick-work mortar but there is not yet sufficient long-term experience with aerated cement-sand mortars used as rendering mixes for any recommendations to be made. Trials so far made at the Station have sometimes shown less satisfactory resistance to rain penetration than that obtained with cement-lime-sand mixes. The performance of a plasticised mix would appear to be specially sensitive to the technique used in its application. Surface crazing has been observed on aerated mortar renderings, including both cement-sand mixes incorporating mortar plasticisers and masonry-cement-sand mixes.

There are also many proprietary materials sold as waterproofing and water-repellent additives for incorporation in rendering mixes. Their use may be justified in special circumstances but it should be remembered that the efficiency of a rendered finish depends primarily on its freedom from cracking.

Crown Copyright Reserved

SCOTTISH LIME AND LIMESTONE ASSOCIATION

At the annual general meeting of the Scottish Lime and Limestone Association held in Edinburgh recently the following office-bearers were appointed for 1960:

Chairman: J. Y. Lind (Wm. Lind and Co., Ltd., Elderslie, Renfrews.).

Vice-chairman: W. H. H. Beeton (Keir and Cawder, Ltd., Kirkmichael, Perths.).

Secretaries and treasurers: Russell and Dunlop, 20 Castle Street, Edinburgh, 2.

Executive committee: A. C. Gordon (Northern Agricultural and Lime Co., Ltd., Aberdeen); A. M. Faichney (Cults Lime, Ltd., Springfield, Fife); E. M. Cleland (Bairds and Scottish Steel, Ltd., Glasgow); R. H. Bathgate (W. T. Bathgate (Lime Works), Ltd., Gorebridge, Midlothian); M. I. Macmillan (James Reid and Co. (1947), Ltd., Lugton, Ayrshire).

F.B.I. INQUIRY INTO INDUSTRIAL TRENDS

Continued Expansion Anticipated

AN outstanding feature of the Federation of British Industries latest inquiry into industrial trends is the upward trend in anticipated capital investment over the next year.

In October for the first time the increase in future investment in plant and machinery outweighed the decreases; this trend has continued more strongly. In this February return a rise is now, for the first time, reported in plans for industrial building over the year ahead.

The rising trend in capital investment intentions is confirmed by the replies to the new question asking about orders received for capital equipment items. Counting only the firms to which the question was relevant the percentages become 48 per cent. up, 40 per cent. same, and 11 per cent. down. The upward balance is nearly as marked as for new orders of all kinds.

Optimism about the general business situation continues to be pronounced. (N.B. Returns were made before the threat of a railway strike.) The trends on output, the rate of new orders (both home and export) and the length of order books continue to rise a little more strongly than four months ago. But the trend in export orders still lags behind home trade.

The higher output has been achieved both by higher employment and by more overtime; with rather more emphasis on the former.

A few more firms (53 per cent. compared with 50 per cent. in October) report that they are working "to capacity" (i.e., to a satisfactorily full level of operation). Many of those previously working to capacity in this sense have managed further to increase their output from new capacity or fuller or more efficient changes.

Labour Recruitment

Labour recruitment is becoming more difficult, though not to a marked degree: one-third of informants say it is harder than four months ago compared with one-quarter in October.

Stocks of raw materials and the amount of work in progress have continued to rise.

There is no evidence that this exceeds what is necessary to support the higher rate of production. In October stocks of finished goods appeared to be falling; the current inquiry suggests that this decline is stopping.

Unit costs appear to be hardening; but the great majority (70 per cent.) of respondents report no change in the general level of their selling prices.

The general picture is of continued expansion and of sustained optimism for the future. There is little sign that inflationary pressures have yet begun to operate, though the hardening labour position is a warning for the future.

EXPERIMENT IN TUBE CONSTRUCTION

London Transport announce that they have placed two contracts for constructing experimental lengths of tube tunnel in connection with the £55m. scheme for the Victoria line underground.

The work will be carried out in the Finsbury Park area by Kinnear Moodie and Co., Ltd., and Edmund Nuttall, Sons and Co. (London), Ltd. Their contracts are valued at £191,000 and £209,000, respectively. The former will provide a concrete-lined tunnel and the latter one lined with cast-iron segments.

The twin tunnel, approximately a mile in length, is being constructed to enable experience to be gained in the use of new methods of tunnel lining and construction for tube railways. No complete new tube across London has been built for some 50 years and the experimental lengths of tunnel will provide important information of the suitability of various construction methods for use in any future tube building.

The tunnels are being constructed on the alignment of the proposed Victoria line at Finsbury Park. If the Government authorises the building of the Victoria line, this section of tunnelling would be incorporated in it.

SAFETY AND THE INDIVIDUAL

Birmingham Group's Annual Dinner

"SAFETY in the last resort depends on the individual worker and the individual employer," stated Mr. Peter J. M. Thomas, Parliamentary Secretary to the Ministry of Labour at the recent annual dinner of the Building Contractors Section, Birmingham and District Industrial Safety Group.

Mr. Thomas drew attention to an estimate by the National Federation of Building Trades Employers that the total cost of accidents in the building industry was not less than £20m. a year, or about seven shillings a week for everyone employed in the industry. It was, he went on, difficult to reconcile this figure with the view that was sometimes expressed that accident prevention was a costly business and that a safe site was an expensive one.

Both the Federation and the Ministry were convinced that safe practice and efficiency went hand in hand. The Ministry believed that the surest and most effective method in cutting down the number of accidents from the existing figure of about 15,000 a year, was by training people in safe practices.

Those on the spot must know what the risks were, and how they should be met. "They must," Mr. Thomas said, "develop an informed safety consciousness. In this the foreman is the key man, and if he can be properly trained in safety a great step forward will be taken in ensuring the safety of workpeople on building sites generally."

Referring to a visit that he had made earlier to the Birmingham Safety Training Centre, he announced that plans now existed for the establishment of further centres in Scotland and elsewhere.

Other speakers at the dinner included Alderman John H. Lewis, Lord Mayor of Birmingham; Mr. A. B. E. Lovett, H.M. Superintending Inspector of Factories, Midland (Birmingham) Division; and Mr. P. B. Whitehouse, deputy chairman of the Building Contractors Section.

BRANCH OFFICE OPENED

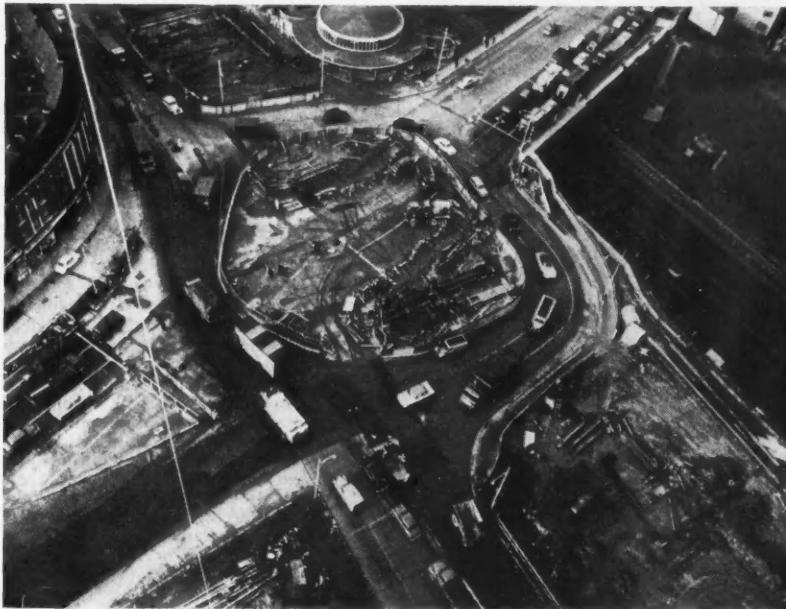
John De Bremaeker and Partners, consulting civil and structural engineers, London, W.C.1, have opened a branch office at Royal London House, Lansdowne, Bournemouth, under the direction of Mr. J. W. Perks, M.I.Struct.E.

(Concluded from page 853)

"Perhaps I could best sum it all up by quoting from our own experience of the trend of costs of multi-storey flats. In the past five years building materials and building labour have advanced in cost by something over 20 per cent. Despite this advance in the index, in actual fact the cost per super. foot of the flats we are building today is within a few pence of the cost of five years ago. It can be said, therefore, that the influence of higher management skill and the better understanding of the inter-play between construction and design have resulted in substantial cost reduction.

The Future

"As to the future, and the role of prophet is not always rewarding, it is at least interesting to speculate. Looking broadly at the national economy, I am sure it is not merely a political expedient to forecast a doubling of living standards over the next 25 years. In the building industry, for example, undoubtedly we face over the years to come a continual rise in wage rates and, at the same time, a reduction in working hours. To enjoy these advantages and still maintain full employment will necessitate continually increasing productivity. Our productivity has steadily risen over the past 10 years and I, for one, firmly believe that this progress will continue. There is an air of confidence in the industry that bodes well for the future."



Work is proceeding rapidly on the new Western Avenue Underpass at the junction of Western Avenue and the North Circular Road. This aerial photograph by Aero Stills, Ltd., shows the diversion of traffic at the junction to enable the central section of the underpass to be completed.

Talking of Safety

by
"DRAGEE"

"WE had the Factory Inspector in last week and he was kicking up a heck of a fuss over the registers."

I lit my pipe and waited for the rest of the story. My visitor was a young Safety Inspector from one of the sub-contract jobs on our Braehead B site, and although this started as a purely social visit, I soon gathered he had something on his mind.

"And was it very awful?" I asked.

"Well, he made it all sound a bit like original sin, but I suppose we *were* asking for it. As you know, we have quite a bit of building work on hand—work on this site started a couple of months ago—and from what I've seen I don't think the staff know very much about registers. Anyway, they dug up a copy of form 36 from somewhere under the table and then there was a general hunt for form 91. Not a sign of it, of course. Nixon—the foreman in charge—swears he's carried out the inspections regularly each week, so technically speaking his only fault is failing to record them. He looked pretty cut up when he saw the F.I. writing some notes, but I told him that the whole object of the registers was to provide a record of the inspections and he couldn't complain if he got a rocket—which he did a few days later. Hence my presence here."

"Is this your first visit to this site?" I asked.

"Yes. I've been having a devil of a time lately. Tearing round the Midlands and making myself thoroughly unpopular ever since the Old Man started the big drive. Anyway, this particular business has got me thinking. What we really want is a regular check on the registers, but it's not easy with so many small jobs scattered about the country. So I'm hoping you might be able to give me some hints!"

"I see. Well, I'm afraid I can't do anything about your present difficulty; but I can tell you about our own system, if that will help you at all."

My visitor gave me a few particulars about his Company's organisation; a medium-sized concern which carried out a variety of small industrial building and constructional contracts. While he talked I took some papers out of the filing cabinet and put them on the table.

"Let's get the scope," I said. "Most of your building jobs last more than the statutory six weeks?"

"Yes, but in any case the arrangement is the same. All the registers are kept—or are supposed to be kept—at the sites

"Dragee," who is a practising safety engineer, would welcome subjects for discussion in this column. All names of persons mentioned in these discussions are entirely fictitious. Questions of law are expressed as the author's personal opinions and are not claimed to be authoritative.—EDITOR.

except part 2 of form 91 which we retain at Head Office."

"So the site staff keep the general register, part 1 of the prescribed register, possibly a register of persons using lead paint, and, of course, the Accident Book?"

"That's correct."

"Now what is your method of getting these registers out to the sites?"

"I'm afraid it's all rather haphazard. When I first took over, the drill was to wait until somebody remembered that such and such a job had started, then one of the progress boys rushed some registers off by the next post, hoping the work hadn't finished before they arrived. Of course that's changed a lot, but it still isn't perfect. Since I took over the job, our registers have been sent out automatically with the contract papers."

"Do you handle that yourself?"

"Not directly. I simply keep supplies in stock and pass them to the contracts engineer when they're needed."

"I see. Well, in our organisation the registers are sent out by my own staff. As soon as the starting date of a contract is notified we make up a complete parcel of registers, forms and posters which are packed into a large cardboard wallet—this is one of them—and the wallet is used to hold the registers while they are on the site. This label on the front reminds the agent that the registers are to be kept available for inspection by the Factory Inspector, and it also instructs him to return the registers to Head Office when they are full and when work on the site is finished. We also obtain a receipt from the agent for the various papers, so there are no disputes about what we send."

"In addition, we have a periodic check on all the registers. The sites are listed in rotation so that their registers come in for scrutiny every six or eight weeks. The agent sends a specially prepared certificate with them, stating that the entries are a true record of inspections actually made. This method also gives us the opportunity to correct omissions and faults, such as entering items of lifting tackle under 'lifting appliances' and so forth. After the scrutiny, the register is stamped and initialled, then returned to the site with a covering note. A copy of the note is sent to the Chief Engineer, so that everyone knows exactly what is going on. That system was started five years ago and today I think our standard of inspection is pretty good."

"It all sounds very efficient. Just the kind of information I need."

"That's fine. Now if you'll come over to these files I'll show you a simple method of indexing the jobs and storing registers for future use."

FOR THE DIARY

Feb. 23.

Institution of Plant Engineers. Meeting at the Royal Society of Arts, John Adam Street, London, W.C.2, at 7 p.m. "Some Problems in the Design of Large Rocket-Engine Test Beds," by R. H. B. Forster, B.Sc., M.I.Mech.E., chief engineer, and L. Breen, senior engineer, British Oxygen Wimpey, Ltd.

Feb. 24.

Meeting of the Institution of Civil Engineers (East Midlands Association) at Herbert Schofield Building, Loughborough at 6.15 p.m. "The Preparation of Drawings and Contract Documents for Major Road Works, including Aerial Surveying," by R. Truswell, B.Sc., and G. Farrimond, B.Sc.

March 4.

Institution of Highway Engineers. Meeting at the Institution of Structural Engineers, 11 Upper Belgrave Street, London, S.W.1, at 5.30 p.m. "New Methods of Automatic Traffic Control," by E. Bailey and E. Thorpe, Automatic Telephone and Electric Co., Ltd.

March 8.

Annual dinner of the Royal Institution of Chartered Surveyors at Grosvenor House, Park Lane, London, W.1. The principal guest will be Mr. Selwyn Lloyd, Secretary of State for Foreign Affairs.

March 30.

Annual general meeting and luncheon of the National Federation of Demolition Contractors, Waldorf Hotel, London, W.C.2.

FIRE PRECAUTIONS IN HIGH BUILDINGS

L.C.C. Planning Committee Report

THE L.C.C. Town Planning Committee will not in the future insist on the requirement that in high buildings the fire lift shall serve the top floor as well as all other floors, provided that the siting and arrangement of the staircases is satisfactory.

This consideration, the committee state, will avoid the necessity of lift structures projecting above the main roof level and possibly presenting an architecturally unacceptable appearance or masking the structures in ways which waste valuable floor space.

The building of more than 140 buildings over 100ft. high in London in the past few years has prompted the committee to prepare a report on the safeguards required both for the prevention of fire and for fire protection and means of escape in high buildings.

The maximum effective height at which the ladders of the London Fire Brigade can operate for fire fighting and rescue work is 100ft.; above that height the Brigade must operate within the building by using staircases and lifts.

To meet these difficulties the council requires the provision of dry rising mains (wet rising mains with booster pumps in very high buildings), lifts which can be used for fire-fighting purposes, and adequate staircases. Experience of fires elsewhere has shown that open staircases may permit the rapid spread of smoke and fire throughout the upper storeys. To guard against this all staircases in buildings in London over 100ft. high are required to be separated from the main floor areas by walls and doors having a good standard of fire-resistance.

In addition, for fire-fighting purposes—and there must be at least one lobby approach staircase in every high building—such a staircase must have a properly ventilated lobby at each floor level to separate the stairs from the main floor areas and the doors to these lobbies must be self-closing and fire-resisting.

To ensure that people should not have to pass through smoke to escape from a building the ideal arrangement is to provide an enclosed staircase at each end of the building so that wherever a fire occurs an exit which does not involve moving towards the fire will always be immediately available; but the committee think that architectural difficulties might arise if this requirement were applied rigidly.

They have agreed, as a working arrangement, that every endeavour shall be made to secure that staircases are located not more than 25ft. or 35ft. from the ends of office buildings or residential buildings, respectively.

THE PROFESSION IN CONTEMPORARY SOCIETY

On March 8, at 6 p.m., Mr. W. A. Allen, A.R.I.B.A., the superintending architect of the Building Research Station, is to read at the Royal Institute of British Architects a Paper entitled "The Profession in Contemporary Society."

In his Paper Mr. Allen will examine the position in society of the professions generally as well as of architects in particular. The relations between professions, science, and industry will be touched upon, and there will be a closer look at the relations between architects and the group of professions and industries with direct interests in the field of building. The functions, standards, responsibility and organisation of professions will also receive attention.

The general thesis of the author is that professions, science and industry are entering a new phase of critical importance in their mutual development.

Trade Section

HOUGH PAYLOADERS TO BE MANUFACTURED IN BRITAIN

HOUGH Payloaders are shortly to be manufactured at the Doncaster Works of the International Harvester Company of Great Britain, Ltd., and the first unit to go into production will be the H-70.

This first model is a 105-h.p. four-wheel-drive tractor shovel of a 7,000lb. carry capacity and can be equipped with a wide range of buckets for specialised purposes. The tractor is regularly equipped with

torque converter and Paylomatic power-shift transmission providing three travel ranges, both forward and reverse.

Price and delivery details will be announced later, International Harvester state.

The Payloader is a product of the Frank G. Hough Co. of Libertyville, Illinois, a wholly owned subsidiary of the International Harvester Company of Chicago.



The Hough Payloader

MOBILE SPACE HEATERS

Flame Contained by Patent Filter

ARANGE of oil-fired portable heaters is now available in this country through Contractors and Industrial Equipment, Ltd., 31 Birmingham Street, Oldbury, Birmingham.

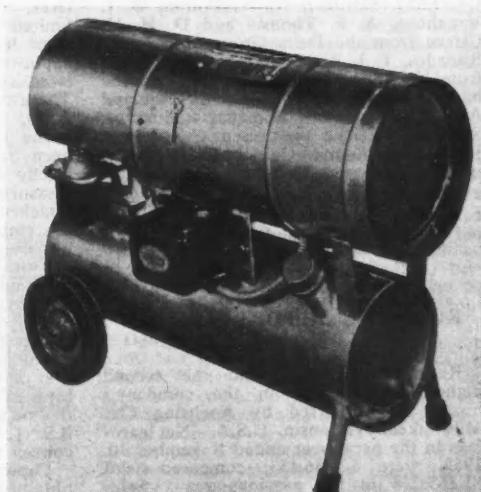
In these heaters the flame is completely contained in a patented Solar Glow flame filter. This operates like a miner's lamp, having openings of .018 sq. in. through which the unburned gases must pass, and eliminates the hazards of sparks and unburned noxious gases. Automatic heat control which prevents overheating is standard equipment. Fire hazards from fuel leaks are reduced by the use of electric solenoid valves instead of hand valves. The fuel tank is made of heavy gauge steel electrically welded and of tubular construction.

The fuel, which may be either paraffin or furnace oil, is drawn from the storage tank by an oil pump, developing approximately 85lb. p.s.i. pressure and forced through the nozzle of the burner where it is atomised into a fine mist. This is then mixed with a metered volume of air and ignited by ignition electrodes resulting in a well defined flame jet inside the combustion chamber. A powerful blower unit drives fresh air around the combustion chamber where it is heated and passes out as a clean

heated air current which can be directed where required.

Operation is by normal A.C. power supply and safety devices include thermostatic control and instant cut off when fuel reaches a minimum level. Starting is also automatic on the turn of the ignition switch.

The first unit available is the Model D.30 which has a heat output rating of 100,000 B.Th.U./hr. and an air delivery of 36,000 cu. ft./hr.



Model D.30 portable heater

BRITISH FIRM TO MAKE OVERSTROM SCREENS

OVERSTROM vibrating screens are now to be manufactured under licence by Armstrong Whitworth (Metal Industries), Ltd., Gateshead. The British firm has the rights for manufacture and sales throughout the world, with the exception of the Americas and New Zealand.

The screens are built for wet or dry, light, medium and heavy service. There are seven sizes ranging from 3ft. x 18in. to 16ft. x 6in. and each can be equipped with one, two or three decks. All screens can be fitted with partial or complete dustproof enclosures, water spray equipment, and heating units which are sometimes required for the finer mesh decks dealing with damp, sticky materials.

No eccentric mechanism is involved to produce the rocking action. Vibration is set up by having unbalanced flywheels mounted at the ends of a plain shaft in the vibrator unit which is fixed rigidly on the screen box. Rotated at high speed, the flywheels set up in the spring-mounted screen a motion which is directly contrary to their own movement.

The amplitude of the screen rocking action is directly proportional to the amount of unbalanced weight in the flywheels and is independent of the speed of the rotation. It can be adjusted to suit varying feeds by adding or removing the counterweights bolted to the inside of the flywheel rims.

No counter balancing is necessary to prevent transmission of vibration to the supporting structure.

UNISTRUT RANGE EXTENDED

Conduit end connections, newly designed cable tray brackets and a smaller pipe roller are three additions to the Unistrut steel channel range of fittings made by Sankey-Sheldon, Ltd., 43 Broadwater Road, Welwyn Garden City, Herts.

The end connections enable conduit to be attached to the end of the Unistrut channel when used as fluorescent lighting trunking. The connection is secured by a single screw in the channel and is supplied ready-drilled for either 1in. or 1½in. conduit which is accommodated inside the channel.

The new cable tray brackets can be more speedily fixed with the self-locating nut and bolt unit to the Unistrut channel or concrete insert, and have a punched-out locating lug to assist alignment. Twin sets of holes accommodate all standard traying components.

Cast pipe chair and roller are designed to take pipes, etc., from 3in. nominal bore downwards. The chair is secured by a single screw to the Unistrut channel.

AMERICAN TOOL BURNS THROUGH CONCRETE

Equipment said to be capable of cutting through concrete, steel or other hard material of any thickness, has been produced by the Linde Department of the Union Carbide International Company, New York.

The principle of the equipment, known as the Oxweld ACL-4 Powder Lance, is the accurate control of intense heat. Lengths of standard black iron pipe are fitted into the front end of the ACL-4, which is connected to an oxygen supply and a source of special Oxweld metallic powder mixture. The oxygen and metallic powder are mixed in the pipe and carried to the material being cut. This mixture is ignited at the end of the iron pipe, producing an extremely high-temperature reaction, that melts both ferrous and non-ferrous material in its path.

On materials such as concrete a special mixture of iron and aluminium powder known as Oxweld No. 201 Lancing Powder is used. Average consumption rates per sq. ft. of concrete cut are: 1,000 cu. ft. of oxygen; 40lb. of Oxweld 201 powder, and 10ft. of standard black iron pipe.

Trade Section

TRACTOR-MOUNTED PAVING MACHINE DEMONSTRATED

A TRACTOR-MOUNTED paving machine, made by Frederick Parker, Ltd., Leicester, and based on an American design, was recently demonstrated at work on resurfacing a stretch of the Coventry By-pass.

The material laid was base course and hot rolled asphalt wearing course, with pre-coated chippings, and the contractors were Limmer and Trinidad Lake Asphalt Co., Ltd.

Assembled on the standard Fordson diesel tractor, the machine can turn on an inside radius of 5ft. It has hydraulic steering and paving speeds from 3ft. to 60ft. a minute. For laying material the machine has three forward gears and one reverse; for travelling six forward and two reverse. Control of its laying speed and most other functions is hydraulic.

The 7-ton machine has a screed heated by bottled gas, pre-cise crowning adjust-

ment and 1in. to 5in. paving depths. It has ample power to push loaded 10-wheel trucks. Laying capacity is up to 80 tons an hour.

The pusher rollers and feed hoppers at the front of the paver are adjustable to suit various types of truck. The material from the hopper is taken to the rear of the paver by transfer conveyor. An oscillating cutter-compactor bar finally lays and compacts the materials and a "floating" screed at the rear of this compacts the material still further.



The Parker paver

HEAVY-DUTY GREASE PUMP

Centralube, Ltd., Eley Estate, London, N.18, have developed a high-pressure pump for feeding heavy lubricants at high pressures. Called the Hercules, it is capable of pumping bituminous materials such as Shell Cardium C or D compound, or Mobil Dorcea 150, and can operate at a maximum working pressure of 15,000 p.s.i.

The pump is foot-operated; it has a handwheel which is turned down approximately every 20 to 40 applications, to ensure that the lubricant finds its way into the pressure chamber. The output per stroke may vary slightly with the type of grease; in the case of a grease of penetration 250, it is 2.3 grams per stroke.

The high pressure that can be developed by the pump is suitable for lubrication of chassis and machine parts and through long pipe lines. It can also be used with positive dividers, and as such is an intermediate step between a centralised lubrication system and grease nipples. The weight of the pump mounted on two wheels is just under 50lb.

SITE IMPROVEMENTS, LTD.

Two new private companies, Site Improvements, Ltd. and its wholly owned subsidiary, Site Improvements (Developments), Ltd., have recently been formed as property investment and property developing and dealing companies, respectively.

The parent company has an authorised and issued share capital of £1,550,000 in Ordinary shares of £1 each (2s. paid) and the subsidiary an authorised share capital of £100,000 in Ordinary shares of £1 each.

The directors of both companies are Mr. H. J. S. French (chairman), Lord Ashcombe, Mr. Robert Clark, Mr. E. J. T. Goudie and Mr. H. E. Netherclift. The secretary and registered office are Mr. R. E. Woolley, F.F.C.S., 54 Warwick Square, London, S.W.1.

NEW ALUMINIUM COMPANY

The Delta Metal Co., Ltd., have announced the formation of a new company, James Booth Aluminium, Ltd., to acquire the whole of the aluminium and light alloy interests of their existing subsidiary, James Booth & Co., Ltd.

The new company will have an issued capital of £10m., of which Delta will contribute £5m. by way of existing assets, and Kaiser Aluminum and Chemical Corporation £5m. by way of additional finance. The new finance will be used to expand and re-equip the company's works at Kitts Green, Birmingham.

Management of the new company will remain in the hands of the Delta Group, and the board of directors will comprise: W. E. Ogden (chairman of the Delta Metal Co., Ltd.) chairman; W. W. Dolton, W. J. Vaughton, A. F. Thomas and D. H. H. Clarke from the Delta Group, and D. A. Rhoades, T. J. Ready and A. H. Branstad from Kaiser Aluminum. W. J. Vaughton has been appointed managing director and A. H. Branstad, assistant managing director. Sir Horace Clarke, the present chairman of James Booth & Co., Ltd., has been invited to become Honorary President.

Provision has been made to ensure that control of the new company will not pass out of the United Kingdom.

KOEHRING REPORT RECORD SALES

Record 1959 sales and the second highest net income in the company's history are reported by Koehring Co., Milwaukee, Wisconsin, U.S.A. Net earnings in the fiscal year ended November 30, 1959, were \$2,386,153, compared with \$1,165,266 in the previous year. Sales amounted to \$60,937,700 against \$45,457,585.

2½IN. PUMP DELIVERS 14,000 G.P.H. AT 10FT. HEAD

"POWER BULLFROG" is the name given to a new self-contained pumping unit introduced by Patay Pumps and Turbines, Ltd., Horton Parade, West Drayton, Middx. It is a development of their Rotodynamic pump, with a flexible drive from the power unit.

This flexible drive shaft allows the pump to work in the liquid to be pumped without valves or any type of priming system. Both axial faces of the impeller rotate freely in the water outside the casing, reducing the chance of foreign bodies jamming between impeller and casing wall and also freeing the seal from any pressure generated by the pump.

Fitted with 2½in. delivery hose the unit is claimed to have a capacity of up to 14,000 gallons per hour at 10ft. total head and almost 12,000 gallons per hour at 20ft. head with a maximum head of 36ft. The standard power unit is rated at 2½ b.h.p.

An additional pump attachment, the "Rana," is available for the Power Bullfrog. This is a medium pressure, medium capacity pump with maximum capacity of 4,000 gallons per hour and maximum head of 100ft.

The Rana attachment can be used submerged or alternatively can be fitted with suction hose and footvalve. On suction duties it is claimed to have a lift of over 31ft. and consequently when used in the standard 17ft. 6in. flexible drive shaft can draw water from 48ft. below ground level, a depth which can be increased to nearly 56ft. if the 24ft. flexible drive shaft is fitted.

SAVILLE TO RUN FOUR MAINTENANCE COURSES

The London branch of Saville (Tractors), Ltd., which last year held a number of successful courses on the maintenance of IH crawler and wheel tractors, are to hold four further courses next month the dates being March 7-9; 14-16; 21-23; and 28-30.

Each course lasts three days and is free of charge.

The school will be held at Saville's new premises, International House, Staines Road, Feltham, Middlesex, and will, as before, be directed by Mr. J. V. Grant, works and service manager.

Application forms, giving full particulars of the school, can be obtained from the above address.

BRITISH STANDARDS

Classification of wood preservatives and their methods of application

That prevention is better than cure is the emphasis of this revised British Standard (B.S. 1282:1959) on wood preservatives. First published in 1945 in a more limited form, the standard now deals at some length with the various methods of application, the selection of wood preservatives, and treatments for various purposes. The grouping of preservatives into tar oil types, organic solvent types and water-borne types proved convenient and has been retained. The main hazards are briefly described, and, although remedial measures for timber which has already been attacked by fungus or insect are outlined, the emphasis is on prevention.

Three appendices give information on the resistance of the heartwood of some common woods to impregnation with preservatives, a list of naturally durable woods, and a bibliography of detailed information on the subject.

This standard is a guide and classification only, and the foreword warns that no form of words indicating that a preservative or preservative treatment conforms to B.S. 1282 should be used, as it would convey no meaning. Price 6s.

Copies of this British Standard may be obtained from the British Standards Institution, Sales Branch, 2 Park Street, London, W.1.

Trade Section

2 CU. YD. BLOW KNOX EXCAVATOR FOR QUARRY WORKING

A MACHINE specially designed for excavating and loading in quarries and gravel pits is now being produced by Blaw Knox, Ltd., 94 Brompton Road, London, S.W.3. Called the BK Hydrascoop, it will handle up to 350 cu. yd. an hour using, it is stated, less than 70-h.p.

For rehandling work a 2 cu. yd. bucket is standard but for light materials such as coal and coke larger buckets can be fitted.

Raising and lowering of the parallel linkage is by hoisting line; clutch and brake drums are booster operated and controlled through foot pedals. Bucket thrust and break-out operations are hydraulically operated through finger-light controls and a digging force of 26.5 tons is exerted at the bucket teeth.

The Hydrascoop has a 360 degrees swing with 20ft. level clean-up radius. It will dig any angle of slope and excavate to 2ft. below ground level. Maximum dis-

charge height is 9ft. 10in. The parallel linkage action gives long reach and high lift, and maintains the bucket level during lifting.

The hydraulic system is fully sealed and constant power to the rams is delivered by the hydraulic pump which is driven by front engine power take-off from the base machine's six-cylinder diesel engine which develops 67 b.h.p. at 1,380 r.p.m. Simple controls provide for a rapid change-over from travel to operation.



The BK Hydrascoop

NEW SIMPLITE SLUDGE PUMP

A MARK III version of the Simplite sludge pump, marketed by William R. Selwood, Ltd., Chandler's Ford, Hants, has an increased maximum output of 3,500 gallons an hour. The size of the pump remains the same, 2in. suction and 3in. delivery.

Two small wheels are now fitted to one end of the base plate. These wheels are clear of the ground when the pump is working but come into operation when the new folding handle at the suction end of the pump is lifted. By this means the pump can be pulled or pushed without difficulty, the weight being 105lb.

Lubrication has been improved by boring through the eccentric shaft so that the large greaser on the end of it immediately above the folding handle now lubricates the two eccentric shaft bearings and the eccentric itself in one operation. All three of these bearings retain the grease reservoir as previously so that they can run for a considerable time without attention.

In the new design an improved type of

shear pin is fitted which connects two flanges. If this shear pin breaks the end can fall clear away but even if a piece is left in position because it is of soft brass no serious damage is caused.

The engine is now mounted on slotted holes so that the chain can more easily be adjusted and the chain guard is improved giving easier dismantling. Inside the base of the pump a small dome immediately below the pump rod acts as a deflector for any stones that may be drawn into the pump so obviating risk of damage to the pump rod.

IMPROVED BROLAC EMULSION PAINT

A new type of water-thinned plastic emulsion paint, known as Brolac P.E.P. and based on a vinyl co-polymer resin, has been introduced by John Hall and Sons (Bristol and London), Ltd., Hengrove, Bristol, 4.

The new paint, claim the manufacturers, may be used on any paintable surface, including brick, concrete, and pebble-dash, either indoors or out, and it will not blister, peel or flake-off under condensation in kitchen or bathroom.

Due to the clinging quality given by the co-polymer base, the paint can be applied to glossy surfaces without preliminary rubbing down, it is stated, and can also be used on hardboard or bare wood without priming.

Developed jointly with the new emulsion paint is a tube-tinting system to be called Brolac Colorvogue, which will give 100 additional colours obtained by tube-tinting selected standard colours with special universal stains.

The system is applicable to all of the Brolac paints, allowing an exact match between gloss enamel, eggshell and emulsion finishes.



The new Simplite pump

AUTOSTOPER VERSION OF HOLMAN ROCK DRILL

THE Silver Three rockdrill made by Holman Bros., Ltd., Camborne, Cornwall, is now available as a single or double extension autostoper.

Developed from the standard Silver Three Handril, the autostoper is integrally mounted to the piston of the feed cylinder and a feed length of 31in. is provided. A positive feed control is provided on the control handle, and lubrication is by line oiler. The feed cylinder bore is 2½in. and the length of the autostoper is 61in. when closed. It weighs 86lb. with a collared steel chuck.

The double extension autostoper was originally developed to suit specific drilling requirements in Australia where local conditions required the use of a stopper which would provide maximum feed with the shortest possible closed length. Its closed length is 51in. which enables the operator to work in tight corners and to angle the autostoper much more than can be done with a single extension machine. A feed length of 40in. is provided, and the feed is controlled within fine limits by means of a sensitive twist grip throttle.

The double extension autostoper has 2½in. and 2¾in. feed cylinder bores. The length of the stopper is 91in. when fully extended. It weighs 98lb.

VERTICAL ROUTING ATTACHMENT

A vertical routing attachment for use with standard square chisel mortising equipment has been produced by B. S. Varley, Sabden, near Blackburn. It is capable of a wide range of wood cutting operations including trenching, mitring, square and scribed tenoning, etc., to a maximum depth of 5in., and fits the position normally held by the square chisel and auger without any modification to the machine.

The holder shank has the same 1½in. diameter as a standard square chisel shank and the ½in. driving shank is identical with the auger used in conjunction with the square chisel. Standard R. H. routing cutters with ½in. diameter parallel shanks are used, and the drive is taken from a 5in. diameter horizontal pulley, via two jockey pulleys to a 1½in. diameter ball-bearing cutter spindle, giving a final driven speed of about 12,000 r.p.m. One jockey pulley is mounted on a cranked spindle to facilitate adjustment to the flat endless driving belt.

CUMMINS DIESEL ALTERNATIVE FOR VIGOR TRACTOR

Vickers-Armstrong (Tractors), Ltd., Newcastle upon Tyne 5, announce that the Vigor tractor is now available powered by the 210-h.p. Cummins NT-6-BI diesel engine.

The turbocharged NT-6-BI is one of the Cummins range from 130-335 b.h.p. built at Shotts, Lanarks. Its basic parts are interchangeable with those of all other British and American-built Cummins engines in the same horsepower range.

IMPORT LICENSING BRANCH

The functions of Import Licensing Branch are being transferred to the Tariff and Import Policy Division of the Board of Trade and the present offices in Marsham Street, London, have been closed.

All applications and inquiries relating to import licensing should now be addressed to the Board of Trade, Tariff and Import Policy Division, Horse Guards Avenue, London, S.W.1, telephone: Trafalgar 8855.

Trade Section

109FT. HIGH PINGON TOWER CRANE WITH 82FT. RADIUS

THE erection system employed on the Pingon P.10-615 tower crane, introduced at the last Ministry of Works Building Plant Exhibition, has now been incorporated in a new and larger model, the P.18.



The Pingon P.18, showing how jib and counter jib are mounted on an inner mast which telescopes into the main mast

In this system the jib and counter jib are carried horizontally on a short "inner mast," having a section slightly smaller than that of the main mast inside which it rises. In effect, the jib and inner mast assembly act like a climbing crane, the main mast representing the shaft in the building in which such a crane is normally carried.

As with a climbing crane this assembly can be raised within the main mast, which is composed of complete sections having one side open to enable them to be positioned round the inner mast by the crane's own trolley hook. The remaining cross-members are then bolted in position, thereby closing the open side, and the inner mast is raised within it ready for the next section. The height of the mast can be increased at any time by the insertion of further sections without either dismantling the jib or even re-reeving the ropes.

The P.18 has a maximum capacity of 40cwt. at 29ft. radius and lifts 14cwt. at its full radius of 82ft. If required, as on a particularly restricted site, for example, the jib length can be reduced to give a maximum working radius of either 66ft. or 43ft.

In its rail-mounted form, the crane offers a maximum height under the hook of 109ft. but, as with other models in the Pingon range, this height can be increased substantially if certain anchorage to the building can be provided. Alternatively, the P.18 can be operated as a climbing crane.

Control is by push button remote control panel, and the crane is fitted with two-speed hoist and slewing motors, the total power requirement being 20 Kva.

George Cohen, Sons and Co., Ltd., Wood Lane, London, W. 12, are the sole U.K. distributors of Pingon cranes.

A NEW Victor Stormguard cab is now in production for the Massey-Ferguson 702 tractor with front end loader. It is made by Victoria Sheet Metal Co., Ltd., Wellington, Salop.

Of all-steel construction with safety glass throughout, the cab conforms with



The 702 tractor with Victor Stormguard cab

Ministry of Transport requirements. It has sliding windows for signalling, and all-round visibility, including to the rear through a large window in the roll-down curtain.

The cab is the full width of the tractor and is supplied complete with additional leg shields and running boards for the protection of the operator. The retail price of £60 ex works, includes electric windscreens wiper and roll-down rear curtain with large flexible window.

NEW COMPANIES

The undermentioned particulars of new companies recently registered are taken from the daily register compiled by Jordan and Sons, Ltd., company registration agents, 116 Chancery Lane, London, W.C.2.—

James Eaton and Sons, Ltd., Wharf Road (off Navigation Road), Chelmsford, builders. £1,500. Directors: James Eaton, 17 Old Court Road, Chelmsford; Cecilia Eaton, 23 Grove Road, Chelmsford; George Eaton, 1 Lady Lane, Chelmsford.

Hitch and Fossey (Builders), Ltd., 107 Seely Road, S.W.17. £2,000. Directors: Ralph W. Hitch, 114 Southcroft Road, S.W.17; Frederick J. Fossey, 15 Gorringe Park Avenue, Mitcham.

Trevose Builders, Ltd., Trevose Golf Club, Constantine Bay, Cornwall. £100. Directors: John C. Gammon and Peter Gammon, 80 Eaton Square, S.W.1; Richard J. Westlake, Pentreath, Constantine Bay, near Padstow, Cornwall.

E. M. Mole (Builder), Ltd., 850 Wimborne Road, Bournemouth. £1,000. Directors: Edgar M. Mole and Mrs. Edna D. Mole, 51 Kingswell Road, Ensbury Park, Bournemouth. S. P. Clements, Ltd., Swell Place, Heavitree, Exeter, builders. £5,000. Permanent directors: Samuel P. Clements and Emily E. Clements, Queens Road, Exeter.

Specialist Builders, Ltd., The Gate House, Pollards Park, Nightingale Lane, Chalfont St. Giles, Bucks. £100. Directors: Wm. Brown, Pine Lodge, Lower Road, Higher Densham, Bucks.; Ernest A. R. Herren, The Gate House, Pollards Park, Nightingale Lane, Chalfont St. Giles; Mrs. Julie Brown and Mrs. Dorothy J. Herren.

H. R. Atkinson and Co., Ltd., Main Street, Ponteland, Northumberland, builders. £1,000. Directors: Herbert R. Atkinson, The Orchard, Dilton Foot, Riding Mill, Northumb.; Robert W. Atkinson, 172 Middle Drive, Darras Hall, Ponteland; Alfred L. Blythman, 170 Middle Drive, Darras Hall, Ponteland.

Tynemouth Builders (Development), Ltd. 24 St. Marys Place, Newcastle upon Tyne. £1,000. Directors: William L. Goffon, 29 St. Georges Crescent, Whitley Bay; Cuthbert Dunleavy, 1 Grange Close, Culvercoats, Tynemouth; John L. Harrison and Arthur Sabiston.

H. B. Mann and Son Building Contractors (Sutton-in-Ashfield), Ltd., Opas House, Market Street, Sutton-in-Ashfield. £5,000. Directors: Herbert B. Mann and Celin Mann, 224 Sutton Road, Mansfield.

J. H. Corker, Ltd., 22 Boar Lane, Leeds, 1, builders. £2,000. Directors: John H. Corker, Cedar Crest, Hill Top, Silkstone Common, Yorks.; Julie C. Hampshire, Hill Top Cottage, Silkstone Common, Yorks.

Cornelly Plant Hire Co., Ltd., 39 Victoria Street, London, S.W.1. £100. Directors to be appointed by the subscribers. Subscribers: Henry T. Holt, 45 Carlton Avenue, Kenton, Harrow; Wm. Baker, Midhurst, St. Louis Grove, Herne Bay, Kent.

Fletcher and Jones (Pipe Fabrications), Ltd. £1,000. Directors: Ronald J. Fletcher and Kathleen Fletcher, 7 Hillside Drive, Pendlebury, near Manchester.

Radford and Walters, Ltd., Central Chambers, Red Lion Square, Eleanor, Derby. builders. £10,000. Directors: John Radford, 16 South Place, Ripley, Derby.; Alfred Walters, 30 Bowler Street, Marehay, Ripley, Derby.

Bilton Built-up Roofing, Ltd., Short Street, Wellington Road, Bilton. £100. Directors: Sydney Haynes, 1 Wellington Road, Bilton, Staffs.; Thomas Sutton, Moxley Road, Bilton, Staffs.

Western Building Co. (Bridgend), Ltd., The Offices of Graham Paul and Co., 10 Dunraven Place, Bridgend. £1,000. Directors: Granville Bryant and Marion R. Bryant, 59 Cowbridge Road, Bridgend.

E. G. Acworth (Builders), Ltd., 207 High Street, Waltham Cross, Herts. £50,000. Directors: Ernest G. Acworth, Glebelands, Coppet Hall Green, Waltham Abbey; Donald E. Acworth, 22 Pick Hill, Waltham Abbey; Minnie Acworth and Raynor P. Acworth.

GERMAN VISIT PLANNED

C. H. Johnson (Machinery), Ltd., Adswood Road, Stockport, Cheshire, sole distributors in the U.K. for the road building machines made by Allgemeine Baumaschinen-Gesellschaft (A.B.G.), Germany, are making arrangements for a party of civil engineers and contractors to visit the Industrial Fair at Hanover on May 2 and 3. The visit will be followed by a tour of major road and airfield construction sites in Germany.

All travel costs within Germany will be paid by A.B.G., while travel costs to and from Germany and hotel and meals expenses will be paid by the participants. C. H. Johnson will make all the hotel and other arrangements and provide English speaking personnel.

THERMALITE PRODUCTION EXPANSION

Thermalite Ytong, Ltd., announce the construction of two new factories—one at Manchester and one in the Greater London area—which are to come into operation early in 1961. These new factories will greatly expand production of Thermalite, which is now manufactured at the Midland factory mid-way between Birmingham and Coventry and the southern factory at Reading. The Company already manufactures 95 per cent. of all high pressure steam cured aerated concrete produced in this country.

Current Constructional Activities

PROJECTS • CONTRACTS • AWARDS

THIS editorial feature provides readers with a comprehensive news service covering forthcoming private and public construction work. Commencing on this page information is given concerning future projects followed by details of tenders being invited. In the third section will be found news of tenders recommended for acceptance, tenders accepted and contracts awarded. Attention is also drawn to the advertisements covering contracts and appointments appearing in the front part of the *Journal*.

BUILDING AND DECORATING (See also Housing Schemes)

Aberdeen.—J. Douglass Mathews and Partners, 3 Ebury Street, London, S.W.1, are the architects for the proposed natural philosophy department at St. Machar Drive, Old Aberdeen, for Aberdeen University. John Dansk and Purdie, 3 Diamond Street, Aberdeen, are the quantity surveyors. G. H. Buckle and Partners, 3 Hamilton Gardens, London, S.W.7, mechanical and electrical consultants, and Cyril Blumfield, 32 Corkran Road, Surbiton, Surrey, the structural consultant. Estimated cost £600,000.

Aberdeen.—City Council approved plans for a new natural philosophy department at St. Machar Drive, Old Aberdeen, for Aberdeen University.

Accrington, Lancs.—B.C. recommended to approve plans, etc., and invite tenders for provision of new fish market.

Barnsley, Yorks.—B.C. recommended to approve plans for erection of club premises, Wellington Street-Wortley Street for Barnsley Radical and Liberal Club, 19 Market Street, and Church hall, Pontefract Road, Lundwood, for Rev. P. J. Reeves, Matlock Road.

Barrow-in-Furness, Lancs.—B.C. preparing working drawings and bills of quantities for erection of a crematorium. Tenders expected to be invited in August or September; to approve scheme for improvements at Wenvington Hall Boarding Special School for Maladjusted Pupils. Estimated cost £4,672.

Borough Surveyor to prepare estimates for erection of community centre and construction of a lighted hard surface playing area on the Ormsgill estate.

B.C. recommended to apply for sanction to borrow £13,000 for conversion of Drumard House as a training centre.

Basingstoke, Hants.—Wessex Regional Hospital Board have approved schemes for a new chest clinic at Basingstoke Hospital and sanitary facilities in staff houses at Park Prewett Hospital. Estimated cost £2,000 and £5,000, respectively.

Beccles, Suffolk.—B.C. recommended to prepare plans for the erection of six garages at Orchard Green; approve scheme for additional works at the swimming pool. Estimated cost £1,000.

Beverley, Yorks.—B.C. recommended to approve works at Cattle Market. Estimated cost £750.

Bexhill, Sussex.—B.C. recommended to approve the provision of a permanent refreshment kiosk on the West Parade. Estimated cost £3,000.

Blackburn, Lancs.—Peter R. Nuttall, Westwood Chambers, 5 Kay Street, Rawtenstall, Rossendale, is the architect, and D. Lomax, Facitt Road, Blackburn, the quantity surveyor, for erection of church hall and presbytery at Shadsworth. Tenders not yet invited.

Blofield and Flegg, Norfolk.—Divisional Licensing Committee have granted a provisional licence for a public house at Laundry Lane, Thorpe, for Buillard and Sons, Ltd., Anchor Brewery, Norwich.

Brighton, Sussex.—Clayton, Black and Davel, 10 Prince Albert Street, are the architects and A. Boxall and Partners, 27 Queens Road, the quantity surveyors for erection of light industrial factory at The Hyde, Bevenden, for West Instruments, Ltd. Estimated cost £50,000.

Burnley, Lancs.—Tenders to be invited soon for erection of St. Augustine's Church, Lowerhouse. Peter R. Nuttall, architect, Westwood Chambers, 5 Kay Street, Rawtenstall, Rossendale, Lancs.

Cheltenham, Glos.—B.C. recommended to apply for sanction to borrow £2,408 for additional works at the public abattoir.

Chippenham, Wilts.—B.C. recommended to approve scheme for the provision of changing room accommodation at the bowling green, John Coles Park, during 1960-61. Estimated cost £800.

B.C. recommended to approve plans, subject to conditions and C.C. approval, for a supermarket with storage and office area at the Bridge House, for Arndale Property Co., Ltd., 118-120 Swan Arcade, Bradford.

Dewsbury, Yorks.—B.C. recommended to approve scheme for converting the disused chapel in Dewsbury cemetery into a Chapel of Rest.

Doncaster, Yorks.—B.C. recommended to approve repair and decoration at Museum and Art Gallery. Estimated cost £2,000.

B.C. recommended to approve plans for licensed premises to be erected at Everingham Road, stage three, Cawley estate, for James Hole and Co., Ltd., Haymarket, Humberstone Gate, Leicester.

Dundee.—Esso Petroleum Co., Ltd., 36 Queen Anne's Gate, London, S.W.1, are to construct an oil depot at Stannergate. Estimated cost £100,000.

Dunoon, Argylls.—B.C. to purchase the Cosy Corner site for the construction of an indoor swimming pool.

Dunstable, Beds.—C.C. to submit to Home Office for approval, sketch plans for a courthouse. Estimated cost £37,000.

Edinburgh.—City Council propose a new office and storage block at King's Stables Road, for Lighting and Cleansing Department. Estimated cost £100,000. Garages and workshops will be built on an adjoining site, £21,000.

Fareham, Hants.—Wessex Regional Hospital Board have approved in principle, the provision of a residential psychiatric treatment unit in the grounds of Knowle Hospital.

Fulham.—L.C.C. approved a scheme for improvements at Everington Secondary School. Estimated cost £13,065.

Grantham, Lincs.—B.C. recommended to approve plan for the provision of a paddling pool at Dysart Park. Estimated cost £600.

Harrogate, Yorks.—Clifford Tee and Gale, 5 Buckingham Palace Gardens, London, S.W.1, are the architects for the erection of a block of offices on the site of the Berkeley Hotel at 35 Victoria Avenue, for the Mercantile Credit Co.

Heywood, Lancs.—Peter R. Nuttall, Westwood Chambers, 5 Kay Street, Rawtenstall, Rossendale, is the architect, and B. D. Etchells, Oxford Road, Manchester, the quantity surveyor, for erection of primary school. Tenders not yet invited.

Iford, Essex.—B.C. recommended to approve plans for the provision of a public convenience at Redbridge recreation ground, Keswick Gardens; sketch plans for proposed erection of shops and office block at north side of The Broadway and appoint Walter Green and Partners, 396 Seven Sisters Road, London, N.4, as quantity surveyors and E. Wingfield-Bowles and Partners, 32 Old Queen Street, London, S.W.1, as heating consultants for the scheme.

Ikeston, Derbys.—B.C. recommended to prepare draft plans for major improvements at the Town Hall and the provision of a new office block adjacent thereto; approve scheme for alterations, repairs and adaptations at 22 Burns Street, to provide office accommodation, estimated cost £2,100; invite tenders for the external painting of 500 Council houses.

Kilroot, Antrim.—A survey has started on a 200-acre site on which Imperial Chemical Industries, Ltd., Imperial Chemical House, Millbank, London, S.W.1, propose to erect a terylene factory.

Laarkshire.—C.C. have approved a £16M. school-building programme for the next five years. The programme includes 59 new schools.

Leamington Spa, War.—B.C. recommended to approve scheme for the equipment store, lavatories and dressing room building at Brunswick playing field.

Leeds.—City Council recommended to invite tenders for the erection of 22 brick garages on land off Coronation Parade, Halton Moor estate; to approve the erection of temporary branch library on a site off Selby Road, Halton, and alterations and improvements at central restaurant in the Town Hall. Estimated cost £3,000 and £5,959, respectively.

Leicester.—Sheffield Regional Hospital Board recommended to appoint Pick, Everard Keay and Gimson, 6 Millstone Lane, Leicester, architects for examination suite at Royal Infirmary Maternity (John Faire Block), and alterations at Fielding Johnson Hospital.

Sheffield Regional Hospital Board recommended to appoint Wood and Weir, Guardian House, 64 Charles Street, Leicester, quantity surveyors for pharmacy at Royal Infirmary and for laundry improvements at Leicester Isolation and Chest Unit.

Lincoln.—Sheffield Regional Hospital Board recommended to appoint A. E. Thornton, Firkin and Partners, 10 Mint Street, Lincoln, quantity surveyors for adaptations at Lindum Lodge, Sewell Road, and for central linen and sluice room at City Hospital.

Llandysul, Cards.—Co. E.C. have approved plans for the second phase of improvements and additions at the grammar school. Estimated cost £34,000.

Loughborough, Leics.—Sheffield Regional Hospital Board recommended to appoint Pick, Everard, Keay and Gimson, 6 Millstone Lane, Leicester, architects, and F. H. Butler, 32 High Street, Loughborough, quantity surveyor for adaptation to 57 Park Road, to provide additional nurses' accommodation for General Hospital.

Luton, Beds.—Borough Architect to proceed with the preparation of detailed plans for the erection of stage I of cleansing depot at Kingsway/Portland Road.

B.C. have approved plans for alterations to the Ashcroft Secondary School; revised scheme for the provision of new baths establishment at Bath Road. Estimated cost £400,000.

B.C. to submit to the Local Education Authority for inclusion in the 1960/61 programme, the following minor schemes: Farley Junior—temporary classrooms, £2,100; Norton Road Junior—temporary classrooms and lavatory and washing improvements, £2,100 and £2,800; Beech Hill Secondary—laboratory conversion, £1,800; Secondary Technical—laboratory, £6,000; Stopley Secondary—caretaker's house, £2,400, rural science unit £2,400, laboratory conversion £1,800; alterations—amalgamation of boys' and girls' departments £800; School Clinic—extension, £17,000.

Maidstone, Kent.—B.C. recommended to approve the extension of the Civil Defence Headquarters at Kenmore to include the provision of a store room and another lecture room and invite tenders for the decoration of the ceiling, trusses and balcony of the large swimming bath. Estimated cost £1,300 and £750, respectively.

B.C. to submit to C.C. for approval outline application for the conversion of 13 Rocky Hill and 107 Tonbridge Road, including the erection in rear garden of an annexe containing 16 single bed-sitting rooms as accommodation for old people; use of land for a combined Borough Surveyor's and Transport Depot, comprising erection of office accommodation and formation of new vehicular access to Loose Road; construction of a new baths establishment on land forming West Park Road allotments.

B.C. recommended to approve plans for additional storey on west wing to form extension to the West Kent General Hospital, for the South-East Metropolitan Regional Hospital Board; installation of three 2,000-gallon underground petrol storage tanks, re-siting of fuel pumps and erection of canopy over pump island, at the Speedwell Service Station, Ashford Road, for the Regent Oil Co., 117 Park Street, London, W.1.

Melton Mowbray, Leics.—Sheffield Regional Hospital Board recommended to appoint Wood and Weir, Guardian House, 64 Charles Street, Leicester, quantity surveyors for maternity unit at St. Mary's Hospital.

Mickleover, Derbys.—Sheffield Regional Hospital Board recommended to appoint Messrs. Gleeds, 7 Clinton Terrace, Derby, quantity surveyors, for extension of main kitchen at The Pastures, Mickleover.

Mickleover, Derbys.—Parish Council to submit to Repton R.D.C. for approval, plans for the erection of a swimming bath and community centre at the rear of the village's memorial hut, Station Road.

Nelson, Lancs.—B.C. recommended to apply for sanction to borrow £4,000 for erection of an aged persons' social centre in Brunswick Street; to approve plan for erection of public conveniences in Victoria Park. Estimated cost £1,400.

Newcastle-under-Lyme, Staffs.—B.C. recommended to approve scheme for the construction of a new covered market. Estimated cost £90,000.

Newport, Mon.—B.C. recommended to prepare working drawings for the construction of the Alway neighbourhood shopping centre.

Northamptonshire.—E.C. propose the erection of county library headquarters on police station site at Angel Street, Northampton.

Nottingham.—Sheffield Regional Hospital Board recommended to appoint Hedley B. Marshall, 8 King Johns Chambers, Bridlesmith Gate, Nottingham, architect, and Wood and Shambrook, Wheeler Gate Chambers, Nottingham, quantity surveyors for centralisation of catering facilities and provision of central staff dining room at Mapperley Hospital.

Nottingham.—City Council recommended to approve scheme for the adaptation, for use by the printing department, of the science laboratories in the old college buildings at Shakespeare Street, estimated cost £6,223; approve in principle for inclusion in the 1960-61 minor works programme the following schemes: Dunkirk Junior and Infant School—school meals accommodation, assembly hall, etc., £20,000; Blue Bell Hill Junior and Infant Schools—improvements to toilets, windows, etc., £14,000; Elms Junior and Infant School—additional classrooms to replace the annexe at Alfred School, urgently needed for Further Education purposes, £15,000; Clifton estate—three-classroom unit to accommodate additional numbers, £11,000; Rosehill Special School—improvements suggested in Ministry of Education letter dated Feb. 23, 1959, £4,000; College of Arts and Crafts—additional accommodation, £10,000.

Oadby, Leics.—Sheffield Regional Hospital Board recommended to appoint Pick, Everard, Keay and Gimson, 6 Millstone Lane, Leicester, architects for recreation room at Mansion House, Stretton Hall.

Oxford.—City Council recommended to approve the following schemes for inclusion in the 1960-61 minor buildings programme: Headington Secondary School—extensions, £20,000; school building for infants at Horspath Road, £15,000; Ormerod School—improvements, £2,600.

Peterborough.—City Council recommended to approve revised scheme for a pavilion at Chestnut Avenue playing field. Estimated cost £3,500.

Plymouth.—City Council recommended to apply for sanction to borrow £2,510 for the provision of a retaining wall at Albert Road, Devonport.

Poplar.—B.C. recommended to appoint J. Stinton Jones and Partners, 15 Gloucester Place, London, W.I., as the consulting engineers for the new baths at Sutherland Road, E.3, and the reconstruction scheme for the Island Baths; also recommended to appoint Thomas Barrett Sons and Partner, 50 Pall Mall, London, S.W.1, as the quantity surveyors for a new public convenience at Sutherland Road.

Portadown, Armagh.—Ulster Farmers Mart Co., Ltd., 58 Bridge Street, propose the fitting of a factory as a cattle mart. Estimated cost £15,000.

Port Glasgow, Renfrews.—Wylie, Shanks and Underwood, 12 Clairmont Gardens, Glasgow, C.3, are the architects for a factory to be built by Scottish Industrial Estates, Ltd., 3 Woodside Place, Glasgow, for Plavtex, Ltd. James Barr and Son, 213 St. Vincent Street, Glasgow, are the quantity surveyors and Donald Smith, Seymour and Rooley, 204 West Regent Street, Glasgow, the electrical and heating consultants.

Portsmouth.—Wessex Regional Hospital Board have approved in principle, the provision of a 35 bed unit and out-patients' department in the grounds of St. James' Hospital.

Radcliffe-on-Trent, Notts.—Sheffield Regional Hospital Board recommended to appoint C. Howitt and Partners, St. Andrews House, Nottingham, architects, and Norman Blears, 24 Birch Street, Accrington, engineer for sanitary annexe in Thornton Ward at Saxonvale Hospital, and Wood and Shambrook, Wheeler Gate Chambers, Nottingham, quantity surveyors for sanitary annexes to Ward 13 and enclosure of verandas for tuberculosis wards, at the Hospital.

Rotherham, Yorks.—Sheffield Regional Hospital Board recommended to appoint James Totty and Co., Carson House, Moorgate Road, Rotherham, architects for storage dispensary at Doncaster Gate Hospital.

Ruohu, War.—R.D.C. to invite tenders for the external painting of 294 houses on 24 sites.

St. Pancras.—L.C.C. approved a scheme for adaptations and improvements at St. Pancras Hospital. Estimated cost £4,930.

Salford, Lancs.—City Council recommended to approve in principle scheme A for rede-

velopment of Broad Street/Ellor Street area which provides for a shopping precinct at Church Street end of site.

City Council to appoint Tom Mellor, Church Wood, Church Road, Lytham St. Annes, architect, Hoare, Lea and Partners, 52 Green Street, London, W.I., heating and electrical engineers, Ove Arup and Partners, 8 Fitzroy Street, London, W.I., structural engineers and Langdon and Every, 21 Russell Square, London, W.C.1, quantity surveyors for Royal Technical College Hostels, and Ove Arup and Partners as consultant structural engineers for extensions to Royal Technical College and Peel Park Technical College.

City Council recommended to apply for sanction to borrow £30,560 for replacement of obsolete fireplaces in properties on the Weaste housing estate.

Scarborough, Yorks.—B.C. recommended to approve plans for erection of 24 lock-up garages at Malvern Crescent, for A. Moore and Son. G. W. Alderson, architect, 4 Pavilion Terrace.

Sheffield.—City Council recommended to appoint Wheatley, Bryon and Partners, Ltd., 73 High Holborn, London, W.C.1, structural engineers for erection of school for spastics and extensions at High Storrs Grammar School.

Regional Hospital Board recommended to appoint Oxley and Bussey, 91 Pinstone Street, architects for two single-storey villa blocks at Grenoside Hospital, and C. Mackechnie, Jarvis and Partners, 34 Victoria Street, London, S.W.1, consulting engineers for up-grading female patients' detached block and installation of lift at Middlewood Hospital.

Sidcup, Kent.—L.C.C. approved a scheme for improvements to accommodation at The Hollies. Estimated cost £3,160.

Slough, Bucks.—L.C.C. approved a scheme for the erection and equipment of a hostel for boys at Britwell estate. Estimated cost £26,400.

Southport, Lancs.—B.C. recommended to approve revised plans and invite tenders for provision of a new changing room at King George V School.

Southwark.—Norman and Dawbarn, 7 Portland Place, London, W.I., have prepared plans for the erection of two additional floors over an existing wing at Borough Polytechnic. Estimated cost £60,090.

Southwold, Suffolk.—B.C. recommended to prepare scheme for the provision of a public convenience near the pavilion on the common.

Spalding, Lincs.—Sheffield Regional Hospital Board recommended to appoint F. J. Lenton and Partners, 16 Finkin Street, Grantham, architects, and K. H. Bole, 32 Carr Street, Sleaford, quantity surveyor for transfer of X-ray department to laundry block at Johnson Hospital.

Staines, Middx.—C.C. recommended to approve the erection of a clinic at Hadrian Way, Stanwell. Estimated cost £11,338.

Stockport, Cheshire.—Ministry have approved scheme for the erection of a training centre at Buxton Road, Chinley, for Derbyshire C.C. Estimated cost £53,150.

B.C. recommended to approve site at Canal Bridge Farm estate for the erection of an aged persons' home; prepare alternative sketch plans for the erection of five single-storey lock-up shops and five shops with separate access flats above at Middlesex Road.

Stoke-on-Trent, Staffs.—City Council recommended to prepare comprehensive scheme for a community centre and hall at the Broadway site, Meir; approve the erection of public conveniences at junction of Summerville Road and Stone Road; subject to Home Office approval, plans for garages for Civil Defence vehicles at Raymond Street, Hanley. Estimated cost £7,290.

Stone, Staffs.—Co. E.C. propose the erection of youth club premises at Stone. Estimated cost £16,950.

Stretford, Lancs.—B.C. recommended to grant planning permission for rebuilding and extending premises in King Street, for the Manchester and Salford Trustees Savings Bank, and factory extension, Park Road, for Kellings Co. of Great Britain, Ltd.

M.E. have agreed to add to the 1960-61 major building programme a two-form instalment of a three-form entry Roman Catholic Secondary School for Girls for Stretford. E.C. urged to include the second instalment of this school in the 1961-62 programme.

Swindon, Wilts.—B.C. recommended to invite tenders for improvements and repairs to the public swimming baths at Milton Road. Estimated cost £65,000.

Thornaby-on-Tees, Yorks.—A. Dicken and Son (Teesside) Ltd., 54 Mandale Road, are to reconstruct their warehouse.

Towcester, Northants.—Brewster Magistrates have granted a licence for the erection of licensed premises at new housing estate, for

the Abington Brewery Co., Wellingborough Road, Northampton.

Tynemouth, Northumb.—Newcastle Breweries, Ltd., Haymarket, Newcastle upon Tyne are to erect a public house at the corner of Balkwell Avenue and Verne Road, North Shields and plans by their own architect have been approved; J. Nimmo and Son, Castle Eden, Co. Durham are to erect a public house, to be known as the Magpie at the corner of Hartington Road and Kirklington Road, Marden. The architects are Newrick and Blackbell, 58 John Street, Sunderland.

Uxbridge, Middx.—C.C. recommended to approve the erection of additional classrooms and a kitchen at the Breakspear Primary School, Ickenham. Estimated cost £18,584.

Wallsend, Northumb.—William Stockdale, 73 Howard Street, North Shields is the architect for shop, bakery, and two houses in flats at 69-79 Park Road, for J. Senior.

Plans have been submitted to the M.E. for the first stage (estimated to cost about £10,000) of alterations and remodelling of St. Aidan's R.C. School at Rosehill. Total cost will be £37,000 and work will begin as soon as Ministry approval is received. D. Brown, 10 Lambton Road, Jesmond, Newcastle upon Tyne, is the architect.

Walthamstow, Essex.—B.C. recommended to approve plans for the erection of public conveniences at the Royal Standard junction.

Walton-on-Thames, Surrey.—C.C. recommended to approve sketch plans for provision of a practical block and library at County Secondary Boys' School. Estimated cost £19,752.

Watford, Herts.—B.C. recommended to approve plans for extension to assembly hall and canteen, Watford Girls' Grammar School, The Crescent, for C.C.

Westminster.—City Council recommended to engage Drower and Son, 28 Victoria Street, London, S.W.1, as the quantity surveyors for conveniences proposed at Hyde Park Corner, total estimated cost £67,100; and as the quantity surveyors for a new depot proposed at 21-23 Farm Street for the Public Cleansing Department.

West Suffolk.—Standing Joint Committee have approved revised scheme for a police station and courthouse at Haverhill. Estimated cost £30,250.

Whickham, Dur.—M. Grady, Ltd., Broadwood Road, Newcastle upon Tyne are to erect four shops and flats, at Swalwell. Wetherell Lamb and Partners, architects, Picton Place, Newcastle upon Tyne.

Whiteabbey, Antrim.—The Hospitals' Authority have approved in principle a scheme for the reconstruction of the main hospital block at Whiteabbey Hospital, for Newtownabbey Hospital Management Committee.

Whyteleafe, Surrey.—C.C. recommended to approve sketch plans for the provision of small hall/dining room, 450-meal kitchen and boiler house at County Girls' School. Estimated cost £29,502.

Wimbledon, Surrey.—C.C. recommended to approve sketch plans for the provision of new kitchen and small hall/dining room at County Girls' School. Estimated cost £29,414.

Weymouth, Dorset.—B.C. recommended to approve in principle the erection of a factory (to be leased to C. and J. Clark, Ltd., Street, Som.) at Chickerell Industrial Estate, estimated cost £75,000; apply for sanction to borrow £8,000 for the provision of public conveniences to serve both the car park at Loddmoor and the chalets at the Sluice Gardens.

Co. E.C. have approved scheme for extensions at the Training College, to provide additional teaching and hostel accommodation. Estimated cost £45,704.

Worcester.—City Council recommended to approve the appointment of Wilson, Colbeck and Partners, 86 Old Brompton Road, London, S.W.7, as quantity surveyors, for improvements to sanitary accommodation at St. John's Boys' School.

Workington, Cumb.—B.C. recommended to approve layout of site for maintenance depot on the Moorclose estate.

B.C. recommended to approve plans for erection of a three-class primary school at Salterbeck, for the Cumberland C.C.

Workson, Notts.—Sheffield Regional Hospital Board recommended to appoint Messrs. Gleeds, 7 Clinton Terrace, Doncaster, quantity surveyors for new laboratory and out-patient department at Victoria Hospital.

ELECTRICAL

Barnsley, Yorks.—Sheffield Regional Hospital Board recommended to appoint Fairhurst and Poppleton, 7 Regent Street, architects for lift replacement at Beckett Hospital.

Caistor, Lincs.—Sheffield Regional Hospital Board recommended to appoint Vallance, Westwick and Associates, White Hart Street, Mansfield, architects for chair lift at Caistor Hospital.

Lincoln.—Sheffield Regional Hospital Board recommended to appoint E. G. Phillips, Son

and Partners, 26 Annesley Grove, Nottingham, consulting engineers for a.c./d.c. change-over at Brace Bridge Heath Hospital.

Sheffield.—Regional Hospital Board recommended to appoint J. D. Maidment, Pembroke House, Palmerston Road, architect for bed lift in Cliff Ward at Nether Edge Hospital, and Oxley and Bussey 91 Pinstone Street, architects for lift in female patients' main block at Middlewood Hospital.

Seaford, Lincs.—Sheffield Regional Hospital Board recommended to appoint Vallance, Westwick and Associates, White Hart Street, Mansfield, architects for a.c./d.c. change-over at Rauceby Hospital.

South Shields, Dur.—E.C. proposes including £90 in its annual estimates for the electric rewiring of the infants' department of Staphope County School.

GAS AND WATER SUPPLY

Barnack, Peterborough.—R.D.C. to prepare scheme for pumping water from the Pilsgate bore to serve Wittering.

Blith, Suffolk.—R.D.C. have submitted to C.C. for approval and grant aid a water supply scheme for the Sizewell nuclear power station. Estimated cost £174,000.

Dewsbury, Yorks.—B.C. recommended to apply for sanction to borrow £3,454 for laying water mains at St. Michael's Close, etc.

Gipping, Suffolk.—Co. Water Supplies and Sewerage Committee have approved for grant purposes scheme for laying water mains in the rural area. Estimated cost £115,600.

Reeth, Yorks.—R.D.C. submitting to the Ministry water supply schemes for Upper and Lower Swaledale. W. K. Rodwell, consulting engineer, 40 North Street, Wetherby. Estimated cost £150,000.

Workington, Cumb.—B.C. recommended to approve the laying of 310yd. of 4in. water main in Ellerbeck Lane. Estimated cost £1,218.

HARBOURS, PIERS AND SEA DEFENCE WORKS

Montrose, Angus.—Harbour Board propose to repair a dock wall. Estimated cost £30,000.

Scarborough, Yorks.—B.C. recommended to apply for sanction to borrow £11,715 for extension of high level sea wall and promenade at Holbeck.

HEATING AND VENTILATING

Bakewell, Derby.—Sheffield Regional Hospital Board recommended to appoint L. Fletcher, North Church Street, Bakewell, quantity surveyor for reorganisation of engineering services at Newholme Hospital.

Barnsley, Yorks.—Sheffield Regional Hospital Board recommended to appoint Fairhurst and Poppleton, 7 Regent Street, architects and R. F. Aldis, St. Mary's Road, Long Ditton, Surrey, consulting engineer for central heating Harvey and Lambert wards and hot water services for kitchen and operating theatre at Beckett Hospital.

Cardiff.—City Council recommended to approve scheme for the provision of new heating apparatus and boiler plant at Guildford Crescent Baths. Estimated cost £12,160.

Derby.—Sheffield Regional Hospital Board recommended to appoint Young and Hall, 9 Southampton Row, London, W.C.1, architects for replacement of boiler at City Hospital.

Dewsbury, Yorks.—Edward A. Pearce and Partners, 28 Baker Street, London, W.1, are the consulting engineers for heating, electrical and mechanical works for new baths.

Humberstone, Leics.—Sheffield Regional Hospital Board recommended to appoint Pick Everard, Keay and Gimson, 6 Millstone Lane, Leicester, architects for additional steam mains at The Towers Hospital.

Leicester.—Sheffield Regional Hospital Board recommended to appoint Pick, Everard, Keay and Gimson, 6 Millstone Lane, Leicester, architects for heating and hot water services at Royal Infirmary Maternity Hospital.

Mansfield, Notts.—Sheffield Regional Hospital Board recommended to appoint A. E. Thornton-Firkin and Partners, Masons Chambers, Low Pavement, Chesterfield, quantity surveyors for central heating and replacement of gas boiler at Forest Hospital.

Mexborough, Yorks.—Sheffield Regional Hospital Board recommended to appoint James Totty and Co., Carson House, Moorgate Road, Rotherham, architect for alterations to boiler plant and services at Montagu Hospital.

Milford, Derby.—Sheffield Regional Hospital Board recommended to appoint G. M. Atkinson and Associates, Jade Glen Chambers, Grosby, Leicester, heating consultant for improvements to heating at Makeney House.

Rotherham, Yorks.—Sheffield Regional Hospital Board recommended to appoint James Totty and Co., Carson House, Moorgate

Road, architects for central heating blocks A, B and part E at Moorgate General Hospital.

Sheffield.—Regional Hospital Board recommended to appoint Oxley and Bussey, 91 Pinstone Street, architects for central heating in administration and male patients' block at Grenoside Hospital, and C. Mackenzie, Jarvis and Partners, 34 Victoria Street, London, S.W.1, consulting engineers for reorganisation of engineering services in female block at Middlewood Hospital.

HOUSING SCHEMES

Aberdeen.—City Council approved, in principle, a housing scheme at Hazelhead. The plan includes 320 dwellings in eight multi-storey blocks, 250 terraced houses, shops and garages.

Andover, Hants.—Borough Surveyor to prepare detailed plans for 12 old people's bungalows at the Drove allotments.

Barnack, Peterborough.—Air Ministry propose the erection of another 365 houses for Air Force personnel at Wittering.

Bishop Auckland, Dur.—U.D.C. considering the erection of a further 115 houses for employees of a local firm.

Bolton, Dur.—Plans approved for four pairs of houses at Lyndon Drive, East Boldon, for R. J. Edwards and Co., Ltd., 18 Frederick Street, Sunderland.

Bolton, Lancs.—B.C. recommended to approve plans for erection of 64 bungalows (semi-detached), Torridon Road, Carron Grove, Lovat Road and Rannoch Road, for A. D. Primrose, 556 Halliwell Road.

Bournemouth, Hants.—B.C. propose the erection of 106 dwellings during 1960/61.

Brandon, Dur.—U.D.C. to borrow £5,395 for the erection of four bungalows.

Carlisle, Cumb.—City Council recommended to invite tenders for erection of a further 100 houses on the Morton estate.

Charlton Kings, Glos.—U.D.C. to apply for sanction to borrow £7,443 for the erection of six one-storey flats at Little Herberts.

Chatham, Kent.—B.C. recommended to approve, subject to conditions, plans for 42 semi-detached houses and garages at Ingle Road extension, for C. J. Howard and Son, Ltd., c/o J. A. Warner, 12 High Street, Rochester; block of 24 flats, two blocks of garages and layout of private access road to flats at site adjoining Berkeley Mount, Old Road, for Wards Construction (Medway), 360 Canterbury Street, Gillingham.

Dawley, Salop.—U.D.C. recommended to grant planning permission for the erection of 26 houses and bungalows at Malvern Crescent, for Lewis Bros. (Wednesfield), Ltd., 10 Blackhalve Lane, Wolverhampton.

Dewsbury, Yorks.—B.C. recommended to approve sketch plan for erection of 12 bungalows at The City, Whitley, and reserve site for erection of public conveniences and bus passenger shelter.

Durham.—City Council to build 10 bungalows at Bent House Lane.

East Retford, Notts.—B.C. propose the erection of 40 houses at West Field estate, six at junction of Northfield Way and West Furlong, six at Moorgate Hill and eight on sites near the town centre during this year.

Edinburgh.—City Council have approved the erection of three 16-storey blocks of houses in the Leith redevelopment area.

Freeridge Lynn, Norfolk.—R.D.C. to negotiate a tender with Hall and Jex, Ltd., 29 Baldwin Road, King's Lynn, for the erection of four bungalows at Castleacre.

Higham Ferrers, Northants.—B.C. propose the erection of six bungalows and a block of six flats at Elizabeth Way.

Huntingdon.—R.D.C. recommended to approve layout plans for 12 Homeville type bungalows and eight flats at Brampton and three pairs of bungalows at Great Stukeley.

Iford, Essex.—B.C. recommended to approve plans and invite tenders for the conversion of 59 Eastwood Road into six bed-sitting rooms and one maisonette. Estimated cost £7,500.

Lancaster, Dur.—J. Biggam, Back Albert Road, Consett, is to erect 36 houses at Wesley Terrace, Castleside, to plans by Eltringham and Lowes, Derwent Street, Blackhill.

Newcastle-under-Lyme, Staffs.—B.C. propose the erection of 150 dwellings at George Street, 28 at New Street, 87 at Hemptalls Lane and 29 at Park Road, Silverdale, during the year.

Newent, Glos.—R.D.C. have approved plans for 44 houses and 14 bungalows with private garages at The Holts, for H. C. Janes, Ltd., 189 High Town Road, Luton.

Newcastle upon Tyne.—Plans prepared by the City Architect for the erection of 270 multi-storey flats in three blocks on the Eastfield Avenue site.

Oxford.—G. Wimpey and Co., Ltd., have submitted to City Council for planning permission scheme for the erection of 81 flats and maisonettes on the site of Cowley Vicarage.

Salisbury and Wilton, Wilts.—Ministry have approved the erection of 49 dwellings at Winterslow, Broad Chalke, Whiteparish, Laversstock, Compton Chamberlayne, Redlynch and Berwick St. James, for R.D.C.

Scarborough, Yorks.—B.C. recommended to approve the erection of 12 houses in Filey Road and five off Filey Road, for M. J. Liddell and Son, Ltd. Wilkinson, Smith and Brittlebank, architects, Martins Bank Chambers, Scarborough; conversion of hotel into 10 flats, 25-26 Esplanade, for Argyll Hotel, Ltd. G. W. Alderson, architect, 4 Pavilion Terrace.

Shipston-on-Stour, War.—R.D.C. have approved revised scheme for two blocks of four two-bedroom flats and six garages at Cherington.

Stroud, Glos.—U.D.C. to prepare sketch plans for old people's bungalows at Uplands.

Sunderland, Dur.—W. and T. R. Milburn 4 Grange Terrace, have prepared a scheme for the erection of houses on two areas of land comprising nearly 10 acres and 13 acres at East Herrington, near Sunderland.

Walthamstow, Essex.—B.C. recommended to approve scheme for the conversion of 50 The Avenue, into two flats. Estimated cost £1,796.

Wandsworth.—B.C. recommended to approve proposals for redevelopment of the Streatham High Road (No. 2) site by erection of a three-storey block of 26 dwellings, and to appoint C. E. Smart and Partners, 42 Theobalds Road, London, W.C.1, as quantity surveyors.

Watford, Herts.—B.C. recommended to approve plans for the erection of a pair of houses for park-keepers at Cassiobury Park.

Whickham, Dur.—U.D.C. to build 69 houses at Athol Street and Victoria Street, Dunston. Fennell and Baddiley, architects, Bridge End Chambers, Chester-le-Street.

Whitby, Yorks.—U.D.C. architect, J. S. Houghton, 9 Skinner Street, has prepared plans for the redevelopment of Haggergate, including the erection of seven maisonettes, 14 flats and two shops. A number of two-bedroom houses are proposed below Abbot's Walk.

Workington, Cumb.—B.C. propose the erection of eight one-bedroom bungalows at Pear Road, Salterbeck.

Wrexham, Denbighs.—B.C. have approved a development plan on traditional lines for Actor Park estate. It provides for 386 houses, 225 garages, 48 flats, plus sites for 343 private dwellings.

PLAYING FIELDS, PARKS, ETC.

Boston, Lincs.—B.C. recommended to approve scheme for the provision of a bowling green near Forbes Road on the Woad Farm estate. Estimated cost £1,250.

Salisbury, Wilts.—City Council have approved the provision of a running track at Fisherton recreation ground. Estimated cost £9,000.

Stretford, Lancs.—B.C. recommended to apply for sanction to borrow £2,400 for provision of miniature golf course in Longford Park.

ROADS, BRIDGES AND SITE WORKS

Aldridge, Staffs.—U.D.C. recommended to approve scheme for the improvement of Dumbleberry Lane from the junction with Barns Lane to Westgate. Estimated cost £29,000.

Andover, Hants.—B.C. to prepare plans for the completion of street works in Mead Road.

Bangor, Down.—B.C. have approved the construction of a ring road, to be completed in 10 years. A contract for the section between Newtownards Road and Bloomfield Road, is to be placed soon. Estimated cost £112,000.

Barry, Glam.—B.C. recommended to approve scheme for the provision of pathways and adequate water supply, etc. and other works incidental to the improvement of Palmerston Road allotments. Estimated cost £1,500; following schemes for inclusion in the 1960/61 road programme: Cardiff Road—classified improvement, £15,000; bridge at Pagger Road—classified improvement, £1,500; Little Robins Lane—widening, £4,000; David Street—access road, £2,500; Lakeside—widening, £3,000 and Claude Road—widening, £4,000.

Billingham-on-Tees, Dur.—U.D.C. Surveyor to prepare a scheme for the reconstruction and redesign of Central Avenue.

Boston, Lincs.—B.C. recommended to approve scheme for the improvement of South Street. Estimated cost £30,000.

Cardiff.—City Council recommended to prepare plans for the improvement of a length of Fairwater Road, from Pwllmelyn Road to Cardiff Road.

Chatham, Kent.—B.C. recommended to invite tenders for paving works at Weeds Wood estate; approve plans for making-up Frederick Street (part) and proposal for the widening at Rochester boundary in conjunction with the

reconstruction of New Road Avenue between Hamond Hill and Rochester boundary.

Dewsbury, Yorks.—B.C. recommended to approve plan, etc., for reconstruction of St. Matthews Road, Westtown, estimated cost £1,000; to apply for sanction to borrow £14,000 for repairs to footpaths in the town centre over a period of three years.

Ilford, Essex.—B.C. recommended to approve scheme for the extension of the existing car parking area at Craven Gardens to provide an additional 190 car spaces. Estimated cost £7,500.

Newport, Mon.—B.C. recommended to approve scheme to replace the ash forecourts of 74 garages with hardcore and tarmac, estimated cost £2,849; following schemes for inclusion in the 1960-61 programme: completion of roads and sewers at Ringland, contract 5, £77,000; completion works phase I and advance preparation works, phase III at Bettws estate £15,000 and £40,000 respectively; invite tenders for advance preparation works at section two of the Bettws neighbourhood unit, £117,300; apply for sanction to borrow £7,000 for the Cardiff Road improvement scheme.

Nottinghamshire.—C.C. have approved scheme for the construction of a dual carriage highway along The Fosse Way.

Rugby, War.—R.D.C. recommended to apply for sanction to borrow £2,000 for estate roads extension works at Dunchurch and Wolston.

C.C. recommended to approve scheme for widening Sheep Street. Estimated cost £5,000.

Stanley, Dur.—U.D.C. to spend £46,000 on the construction of roads and sewers to serve 188 proposed houses and 56 garages at Lintz. Tenders will be invited shortly for the erection of the first batch of houses under the scheme. The quantity surveyors are J. W. Summers and Partners, 3 Jesmond Road, Newcastle upon Tyne.

Stockton-on-Tees, Dur.—Borough Engineer to prepare plans for further roads and sewers in the Victoria area.

Tynemouth, Northumb.—B.C. to spend £10,000 extending Preston Cemetery.

SEWERAGE, SEWAGE AND REFUSE DISPOSAL

Barnack, Peterborough.—R.D.C. preparing an extension to the Wittering sewerage scheme.

Barnet, Herts.—U.D.C. have approved drainage scheme to relieve the flooding of houses at East View. Estimated cost £6,700.

Billingham-on-Tees, Dur.—U.D.C. to consider £11,400 scheme for improving the sanitation at Cowpen Bewley.

Cheltenham, Glos.—R.D.C. recommended to proceed with the preparation of sewerage schemes for the villages of Laverton and Dumbleton.

Consett, Dur.—U.D.C. to carry out a sewerage scheme at Iveston to cost £7,400.

Dewsbury, Yorks.—B.C. recommended to apply for sanction to borrow £1,065 for laying of foul sewer in Whitley Road.

Dorchester.—B.C. recommended to instruct A. P. I. Cotterell and Son, consulting engineers, 54 Victoria Street, London, S.W.1, to proceed with the preparation of plans and sections for the construction of the 18in. outfall sewer from Little Britain to Lounds Mill, forming part of stage II of the sewerage and sewage disposal scheme.

Forehoe and Henstead, Norfolk.—Ministry have approved in principle, scheme for the provision of sewerage facilities for Hethersett and Cringleford, for R.D.C. Estimated cost £141,000.

Llanfyllin, Monts.—R.D.C. to prepare a detailed sewerage scheme for Llanfechain.

Lothingland, Suffolk.—Co. Water Supplies and Sewerage Committee have approved for grant aid, R.D.C.'s sewerage scheme for Lound. Estimated cost £16,800.

Richmond, Yorks.—R.D.C. to apply for sanction to borrow £19,611 for a sewerage scheme to serve the Darlington Road area.

Sandwich, Suffolk.—Co. Water Supplies and Sewerage Committee have approved for grant aid, R.D.C.'s revised sewerage scheme for Holbrook. Estimated cost £52,250.

West Kesteven, Lincs.—R.D.C. have approved, subject to Ministry approval, sewerage and sewage disposal scheme for Long Bennington. Estimated cost £80,000.

STREET LIGHTING.

Glen Parva, Leics.—Parish Council recommended to approve scheme for improvement of street lighting in Little Glen Road. Estimated cost £1,702.

Hampstead.—Supply of following, for B.C.: Sodium discharge lanterns. General Electric Co. Ltd., Magnet House, Kingsway, London, W.C.2, £3,313; lamp columns and installation of equipment, O. C. Summers, Ltd., 111 York Way, London, N.7, £18,502 (both recommended).

Jarrow, Dur.—B.C. recommended to approve two sodium street lighting schemes. These include Valley View and Primrose Terrace (£3,622), and High Street (£8,461).

Leek, Staffs.—U.D.C. to apply for sanction to borrow £2,316 for extending the electric lighting in Cheadle Road to the urban boundary; invite tenders for the provision of electric lighting in Buxton Road to the Moss Rose, estimated cost £4,000; approve the conversion from gas to electricity of street lighting in Hillswood Avenue and Nahill Avenue, £1,877; provision of electric lighting in Westwood Drive and Springfield Road, £900 and £756 respectively.

Sandy, Beds.—U.D.C. to prepare alternative street lighting schemes for the trunk and other main roads in the area.

CONTRACTS

*Full details of the Contracts marked * will be found in our Advertisement Columns.*

BUILDING AND DECORATING

(See also Housing Schemes)

Aberdeenshire.—Modernisation of sanitary accommodation and alterations to existing building, Longhaven Primary School, Longhaven, for C.C. Following trades: Mason work; carpenter and joiner works; plumber work; plaster work; electrical work; painter and glazier works. Applications to Jenkins and Marr, architects, 3 Bon-Accord Crescent, Aberdeen, by Feb. 22. Tenders by March 7.

Altrincham, Ches.—External painting to 41 houses and 28 two-storey flats on the urban estate, for B.C. Documents from the Surveyor, Town Hall, Altrincham. Tenders by Feb. 26.

Amersham, Bucks.—External redecorations for houses on sites varying from eight to 54 houses in various parts of the area, for R.D.C. Applications to J. Godbore, engineer and surveyor, Elmodesham House, 42 High Street, Amersham, by Feb. 29.

Ashton-in-Makerfield, Lancs.—Covering with bituminous felt the outbuildings of certain Council houses, for U.D.C. Documents from the Surveyor, Town Hall, Ashton-in-Makerfield. Tenders by Feb. 26.

Belfast.—Construction of an extension to the factory of Tir-Oen, Ltd., at Broadway, Donegall Road, for Ministry of Commerce. Documents from the Ministry, Room 33, Chichester House, 64 Chichester Street, Belfast. Deposit £3. Tenders by March 4.

Belfast.—Supply and fixing of purpose made aluminium alloy windows at petty sessions courts, Chichester Street, for Ministry of Finance. Documents from Room 103, Law Courts Building, Belfast, 1. Tenders by Feb. 24.

Belford, Northumb.—Erection of public convenience at Benthall, Bednall, for R.D.C. Documents from W. R. Kirk, surveyor, Council Offices, Belford. Tenders by Feb. 26.

Beverley, Yorks.—External painting of 97 houses, as follows, for B.C.: (Contract 1) 39 houses on Swinemoor estate; (2) 58 houses, Holderness Crescent. Documents from the Borough Engineer and Surveyor, Municipal Offices, Lairgate, Beverley. Tenders by March 5.

Birmingham.—Construction of an administrative building comprising of lavatories, first aid room, messroom and shelter, at Sarehole Mill recreation ground, Hall Green. Documents from the General Manager, Parks Department, Civic Centre, Broad Street, Birmingham, 1. Deposit £2 2s. Tenders by Feb. 29.

Blofield and Flegg, Norfolk.—External painting of 426 Council houses and bungalows in various parts of the district, for R.D.C. Documents from the Housing Manager, Council Offices, Acle. Tenders by Feb. 29.

Brecknock, Brecons.—Erection of a new Council chamber and extension to the existing office accommodation at the Co-noll's Offices, Oxford House, The Watton, for R.D.C. The total area of the extension is approximately 4,000 super. ft. i.e., 2,000 super. ft. on each of two storeys. Documents from Merton Jones and Richards, architects, St. Mary's Chambers, Abergavenny. Deposit £3 3s. (cheques payable to R.D.C.). Tenders by March 17.

Bury, Lancs.—External painting of the Market Hall, for B.C. Documents from the Borough Engineer, Town Hall, Bury. Tenders by Feb. 26.

Bury, Lancs.—Pointing and repair of stonework to the dome of the Market Hall, for B.C. Documents from the Borough Engineer, Town Hall, Bury. Tenders by Feb. 26.

Cardiganshire.—Construction of two new laboratories, four new classrooms, new stage and alterations to the fabric of the existing school at Llandysul Grammar School, for C.C.

Documents from the County Architect, County Hall, Aberayron. Deposit £2 2s. Tenders by March 22.

Cheadle, Staffs.—Erection of one block of two shops with two flats over at Kingsway, Weston Coyney, for R.D.C. Documents from the Engineer and Surveyor, Council Offices, Leek Road, Cheadle. Tenders by March 9.

Cookstown, Tyrone.—Extensions to Daintif Brassiere Co. and Ulster Corset Manufacturing Co. factories at Burn Road. Documents from John A. Tynan, quantity surveyor, 33 Malone Road, Belfast. Deposit £5 5s. Tenders by Feb. 24.

Cornwall.—Sub-contract for structural steel-work in connection with the proposed erection of a new fire station at Camborne, for C.C. Applications to the County Architect, County Hall, Truro, by Feb. 20.

Down.—Supply and erection complete of the steelwork in Banbridge (New) Technical Intermediate School, for Co. E.C. Documents from the architects, R. Ferguson and S. McIlveen, 15 College Gardens, Belfast, 9. Deposit £3 3s. Tenders by Feb. 25.

East Ashford, Kent.—Erection of garage building at the Council Depot, Wye, for R.D.C. Documents from the Surveyor, Council Offices, 8 Elwick Road, Ashford. Tenders by Feb. 29.

East Suffolk.—Erection of extensions of some 30,000 sq. ft. floor area plus alterations to the existing buildings, at Kesgrave Modern School, for C.C. Applications to the County Architect, County Hall, Ipswich, by March 3. Tenders by April 7.

Edinburgh.—Demolition, upfilling and concrete work at disused siding, Balcarres Street cleansing depot, for City Council. Documents from the Engineer and Manager, Lighting and Cleansing Department, 329 High Street, Edinburgh. Tenders by Feb. 24.

Ellesmere Port, Ches.—Erection of 28 lock-up garages and ancillary works, together with site works, at Atherton Road, site 7 and extension, Mill Lane/Overpool Road, contract 289, for B.C. Documents from the Engineer and Surveyor, Queen Street, Ellesmere Port. Tenders by Feb. 29.

Ellesmere Port, Ches.—Erection of 25 lock-up garages and ancillary works, together with site works, at Atherton Road, site 4, contract 288. Documents from the Engineer and Surveyor, Queen Street, Ellesmere Port. Tenders by Feb. 29.

Essex.—Following, for C.C.: (1) Building work in connection with sewage purification plant, estimated cost £2,200 at the Children's Home, Evebrook, Sandon; (2) a new assembly hall in brick and steel-framed construction, and alterations to existing buildings, and external works, estimated to cost £34,500, at the Billericay County Secondary School. Applications to H. Connolly, architect, County Hall, Chelmsford, by Feb. 20.

Fareham, Hants.—Construction of a canteen, size 48ft. long by 20ft. wide and 11ft. high at Fareham abattoir, for Wessex Slaughtering and Canning Board. Applications to the office of the Engineer to the Board, Westbury Manor Fareham, Hants. Deposit £2. Tenders by March 3.

Gravesend, Kent.—Improvements to 301 properties on Kings Farm estate, for B.C.: (a) (1) Removal of old kitcheners and the installation of tiled surrounds and open fires with back boilers; (2) converting certain direct hot water systems to indirect; (3) removing certain brick coppers; (4) providing lavatory basins, replacing certain baths and replacing certain sinks. (b) Provision of an electrical heating circuit and one lighting point to the majority of these properties. Documents from the Engineer and Surveyor, 6 Woodville Terrace, Gravesend. Tenders by March 14.

Halifax.—Kitchen alterations at Farfield residential establishment, for B.C. Applications to the Borough Engineer, Crossley Street, Halifax, by Feb. 29. Deposit £1, cheques payable to Corporation.

Hambledon, Surrey.—External painting of Council dwellings as follows, for R.D.C.: Twenty-one at Alfold: 40 at Chiddingtonfold; 10 at Churt; eight at Cranleigh; four at Dockenfield; four at Ewhurst; 17 at Milford; six at Shamley Green; 77 at Witley. Documents from the Engineer and Surveyor, Council Offices, Bury Fields, Guildford. Deposit £1 1s. (cheques payable to the Council, crossed Lloyds Bank, Ltd., and sent to the treasurer, Council offices). Separate tenders are required for each group of dwellings, as set out on the form of tender, and contractors may tender for one or more groups. Tenders by March 7.

Hambledon, Surrey.—Alterations, repairs and general maintenance works to block of garages to house nine vehicles at the public health depot, Alfold Road, Cranleigh, for R.D.C. Documents from the Engineer and Surveyor, Council Offices, Bury Fields, Guildford. Deposit £2 2s., cheques payable to R.D.C. Tenders by March 7.

Hampshire.—Erection of kitchen (approx. area 1,550 sq. ft.) and ancillary works at

Farnborough Grammar School, for C.C. Applications to W. H. Saunders and Son, architects, 22 Brunswick Place, Southampton, by March 1. Deposit £1 1s, cheque payable to County Treasurer.

Harrogate, Yorks.—Following, for B.C.: (1) External painting 321 houses; (2) painting 714 lamp pillars in the Otley Road to Parliament Street area. Documents from C. E. Fellows, borough engineer, Municipal Offices, Harrogate. Tenders by Feb. 25.

Harrogate, Yorks.—Erection of one block of public conveniences (all trades) at Devonshire Place, for B.C. Documents from the Borough Engineer, Municipal Offices, Harrogate. Tenders by Feb. 26.

Hertford.—External painting of 95 Council houses and 10 garages, situated in seven parishes, or any group of these houses, for R.D.C. Documents from the Housing Manager, Council Offices, Wallfields, Pegs Lane, Hertford. Tenders by March 14.

Higham Ferrers, Northants.—External painting of 57 houses in the Borough of Higham Ferrers, for B.C. Documents from Borough Surveyor, Town Hall, Higham Ferrers. Tenders by March 12.

Hitchin, Herts.—Supply and erection of 73 garages, for U.D.C. Deposit £2 2s. Tenders by March 11.

Hull.—Internal painting at various schools during the Easter vacation, for City Council. Documents from the City Architect, Guildhall, Kingston-upon-Hull. Tenders by March 2.

Ilkeston, Derbys.—Repainting 552 houses, for B.C. Tenders by March 7.

Inverness-shire.—Reconstruction of a section of the Kyleakin-Portree Road, route A.850, Skye, for C.C. The length of the section is approx. 3.75 miles and will comprise an 18ft. carriageway, including a 96ft. span arch bridge. Documents from the office of the County Surveyor, County Buildings, Inverness. Deposit £3. Tenders by Feb. 26.

Isle of Wight.—Extensions, etc., to the piggeries at the West Wight Secondary School, Freshwater, for C.C. Documents from the County Architect, County Hall, Newport, Isle of Wight, by Feb. 19. Deposit £1 1s. Tenders by March 11.

Kesteven.—Provision of a new kitchen at Heckington C. of E. School (Controlled), for C.C. Submit names to the County Architect, County Offices, Sleaford, Lincs., by Feb. 22. Tenders by March 14.

Kirkcaldy.—Construction and erection of glasshouses and boiler-house at Ravenscraig Park Nurseries, for B.C. Documents from the Parks Superintendent, Town House, Kirkcaldy. Tenders by Mar. 14.

Lincoln.—Provision of new kitchen to Heckington C. of E. School, for C.C. Applications to the Architect, County Offices, Sleaford, by Feb. 22. Tenders by March 14.

Lindsey.—Completion of the following, for C.C.: (a) Two-form entry infants' school, Heapham Road, Gainsborough, containing approx. 7,000ft. super. floor area; (b) extension to Gainsborough Technical College, containing approx. 11,400ft. super. floor area; (c) extensions to Barton-on-Humber Grammar School, containing approx. 10,500ft. super. floor area. Documents from A. Ronald Clark, county architect, County Offices, Lincoln. Deposit £3 3s. each (cheque). Tenders by March 17.

Louth, Lincs.—External painting of 178 houses, to be let in five contracts, and tenderers may quote for any or all of the contracts, for B.C. Documents from the Housing Manager, 41 Eastgate, Louth. Tenders by Feb. 29.

Luton, Beds.—Erection and completion of proposed science block and enclosure of existing swimming bath, Luton High School, for B.C. Documents from Borough Architect, Town Hall, Luton. Tenders by March 11.

Malden and Coombe, Surrey.—External decorations to Council properties, for B.C. The work consists of external painting of two-storey houses and three- and four-storey flats, and will be divided into contracts not exceeding £500 in value. Applications to John Apse, engineer, Municipal Offices, New Malden, by March 7.

Manchester.—Painting and decorating at various schools, for City Council. Documents from City Architect, P.O. Box 488, Town Hall, Manchester. Tenders by March 4.

Manchester.—Erection of five shops and five maisonettes at Peel Hall neighbourhood, Wythenshawe, for City Council. Documents from City Architect, P.O. Box 488, Town Hall, Manchester. Tenders by Feb. 26.

Manchester.—Supply and erection of metal balustrades at Moston College of Further Education, for City Council. Tenders by March 2.

Manchester.—Cleaning and painting of approx. 3,800 steel standards and 2,700 cast-iron pillars. The work is to be divided into three contracts, for City Council. Documents from the City Surveyor, Town Hall, Manchester, 2. Tenders by Feb. 29.

Manchester.—Erection of a public convenience at Hunters Lane, Gorton, for City Council. Documents from City Architect, P.O. Box 488, Town Hall, Manchester. Tenders by March 2.

***Manchester.**—Alterations to Withington Library, for City Council. Tenders by March 9.

Manchester.—Following, for B.C.: (a) Part demolition and alterations to boiler house; (b) scaling and cleaning concrete water supply tank and demolition of cast-iron water tanks, at Langho Colony. Documents from City Architect, P.O. Box 488, Town Hall, Manchester. Tenders by Feb. 26.

Martley, Worcs.—External painting of 48 Council houses, for R.D.C. Documents from the Surveyor, 1 The Tything, Worcester. Tenders by March 11.

Merioneth.—Erection of a canteen/kitchen at Melin-y-Wig Primary School, near Corwen, for E.C. Documents from the Architect, County Offices, Lombard Street, Dolgellau. Tenders by March 1.

Mildenhall, Suffolk.—Painting Council houses in the parishes of Barton Mills, Brandon, Gazeley, Freckenham, Lakenheath, Mildenhall (High Town, Beck Row, Holywell Row and West Row), Moulton, Tuddenham, Worlington, for R.D.C. Documents from the Engineer and Surveyor, Council Offices, Mildenhall. Tenders by March 28.

Montgomeryshire.—Erection of a new primary school at Bausley, for C.C. Documents from Director of Education, Education Offices, Newtown. Deposit £2 2s. Tenders by Feb. 29.

Morecambe and Heysham.—Erection of a shelter at Half Moon Bay, for B.C. Documents from the Borough Engineer, Council Offices, Morecambe. Deposit £1. Tenders by March 7.

Oxfordshire.—List of approved contractors for the carrying out of repairs, etc., to smallholdings properties from time to time, for the Smallholdings Committee. Firms should submit their names to the County Land Agent, Park End Street Offices, Oxford, together with a statement of the maximum distance from their place of business at which they are prepared to work and giving the names and addresses of two land agents or architects to whom reference may be made. Contractors whose names are already on the list need not make a fresh application.

Newbury, Berks.—Installation of lavatory basins and alterations to rear entrance in respect of 1-8 Downend, Chieveley, for R.D.C. Documents from Surveyor, Phoenix House, Newbury. Tenders by March 1.

Newcastle upon Tyne.—Construction of a rest room at the West Road Crematorium, for City Council. Applications, in writing, to the City Architect, 18 Cloth Market, Newcastle upon Tyne, 1. Tenders by March 8.

Norfolk.—Erection of a new house, set of farm buildings, and adaptations to existing houses and buildings, at Gayton, for C.C. Applications to the County Land Agent, 20 Hill House Road, Norwich. Tenders by Feb. 22.

Nottingham.—Formation of a kitchen at The Clifton Hall Girls' Grammar School, for City Council. Documents from R. M. Finch, engineer and surveyor, the Guildhall, Nottingham. Deposit £2. Tenders by March 9.

Ormskirk, Lancs.—Provision and erection of steelwork for roof, Victoria Water Tower, for U.D.C. Documents from the Surveyor, Council Offices, Burscough Street, Ormskirk. Tenders by Feb. 26.

***Rugby.**—Modernisation of 100 houses at Croop Hill estate, for B.C. Deposit £2 2s. Tenders by March 1.

Salisbury, Wilts.—Construction of a public convenience and all ancillary works at Old Sarum open space, off Stratford Road, for City Council. Documents from the City Engineer, The Council House, Salisbury. Tenders by March 14.

Shipley, Yorks.—Demolition of the existing buildings, site clearance and the erection of four shops and maisonettes at Leeds Road, for U.D.C. Documents from the Surveyor, Town Hall, Shipley. Deposit £5 5s. Tenders by March 4.

Sidmouth, Devon.—Proposed alterations and renovations public conveniences, The Market, for U.D.C. Applications to the Engineer and Surveyor, Council Offices, Sidmouth, by Feb. 23.

Sidmouth, Devon.—External painting of council houses, for U.D.C. Documents from the Engineer and Surveyor, Council Offices, Sidmouth. Tenders by Feb. 29.

Southampton.—Erection of pavilion at Stoneham Lane (west side), for B.C. Applications, in writing, to Borough Architect, Civic Centre, Southampton, by Feb. 20.

Southampton.—Conversion of two classrooms into housecraft room and other sundry alterations at Mount Pleasant Secondary Girls' School, for B.C. Applications, in writing, to Architect, Civic Centre, Southampton, by Feb. 20.

Southport, Lancs.—Erection of a shower and changing room block at the King George V

School, Scarisbrick New Road, for B.C. Documents from Architect and Town Planning Officer, 99-105 Lord Street, Southport. Deposit £2 2s. Tenders by March 11.

Southwell, Notts.—Internal repainting of the Council offices, 8 Westgate, for U.D.C. Documents from M. England, architect and surveyor, 7 Westgate, Southwell. Tenders by March 7.

Stretford, Lancs.—External painting to Council housing estates during 1960, for B.C. Applications to the Estates Manager, Town Hall, Talbot Road, Stretford, by Feb. 27.

Sunderland.—Erection of Monkwearmouth community centre, for B.C. Documents from Borough Architect, Grange House, Stockton Road, Sunderland. Deposit £2 2s., cheque payable to Corporation. Tenders by Feb. 26.

Sutherland.—Following trades for the erection of new Clyne J.S. school, Brora, for C.C. Excavator, builder, brick and concrete work. Applications to E. W. Brannen, county architect, Dornoch, by Feb. 27.

Swanscombe, Kent.—External decorations to approx. 125 council houses. The work to be carried out in the period April 1 to Sept. 30, 1960, for U.D.C. Documents from the Surveyor, Council Offices, Swanscombe Tenders by March 7.

Swinton, Lancs.—Erection of two bungalows with electric floor heating, for B.C. Documents from the Borough Engineer, Town Hall, Swinton. Tenders by Feb. 29.

Thurrock, Essex.—Re-roofing of 33 houses at Grays, for U.D.C. Documents from the Estates Manager, Whitehall Lane, Grays. Tenders by Feb. 29.

Twickenham, Middx.—External painting of houses, flats and temporary bungalows on seven corporation estates, for B.C. Documents from Engineer and Surveyor, Municipal Offices, Twickenham. Deposit £2 2s. Tenders by March 4.

Tynemouth, Northumb.—Repair and renewal of public conveniences at: (1) Minton Lane; (2) East Howdon; (3) Hawkey's Lane; (4) Ancroft Avenue, for B.C. Documents from the Borough Surveyor, 16 Northumberland Square, North Shields. Deposit £1 1s. Tenders by March 4.

Wanstead and Woodford, Essex.—Supply and erection of a precast concrete frame for a building of approx. 2,850 sq. ft. complete with roofing and rainwater goods, at Transfer Depot, for B.C. Documents from the Engineer and Surveyor, Municipal Offices, High Road, London, E.18. Deposit £2. Tenders by Feb. 26.

Wandsworth.—Building or maintenance works to municipal properties (other than small housing repairs and decorations) of an estimated value not exceeding £3,000, for B.C. Applications to J. Noel Martin, town clerk, Municipal Buildings, S.W.18, by Feb. 29.

Wandsworth.—Applications from contractors who may be invited from time to time to undertake building or maintenance works to properties (other than small housing repairs and decorations) of an estimated value not exceeding £3,000, for B.C. Applications, giving financial and technical references, to J. Noel Martin, town clerk, Municipal Buildings, Wandsworth, S.W.18, by Feb. 29.

West Riding.—Provision of new gates and rebuilding of boundary walls at Great Houghton C.E. (Controlled) School, for C.C. Documents from H. Cockell, A/Divisional Education Officer, 8 St. John's North, Wakefield. Tenders by March 4.

West Riding.—Remodelling of the house-craft room at Otley Prince Henry's Grammar School, for C.C., comprising of removal of the existing equipment, installation of new equipment and fixtures together with the renewal of floors and other ancillary works. Tenders by Feb. 24.

West Sussex.—Adaptations to provide home for the aged at 52 Shelley Road, Worthing, for C.C. Applications to the County Architect, County Hall, Chichester, by Feb. 20.

Whitstable, Kent.—Tenders are invited for construction in brickwork and corrugated asbestos sheeting of a new 90ft. x 87ft. Highways Depot at Station Road, for U.D.C. Documents from Engineer and Surveyor, The Castle, Whitstable. Tenders by Feb. 29.

Wigtown.—Conversion of Bellevilla House, Stranraer, to an old people's home, for C.C. comprising: Excavator, concretor, mason and brick works; carpenter, joiner and glazier works; slater work; flat roof finishing work; plumber work; plaster and cement work; electrical work. Applications, in writing, to the County Architect, 23 Lewis Street, Stranraer, by Feb. 23.

Wimbledon, Surrey.—Internal redecoration of auditorium of Public Hall, for B.C. Documents from Borough Engineer and Surveyor, Town Hall, Wimbledon, S.W.19. Tenders by March 16.

Wisbech, Cambs.—External painting of the following, for B.C.: (a) Thirty houses, West Parade; (b) 56 houses, Walsoken; (c) 104 houses, Southwell Road; (d) 116 houses, eight flats and six bungalows, Tinker's Drove estate. Documents from the Borough Engineer, Church Terrace, Wisbech. Tenders by March 5.

Wortley, Yorks.—Internal redecoration and painting of the Council offices at Grenoside, for R.D.C. Applications, in writing, to Engineer and Surveyor, Council Offices, Grenoside, Sheffield. Tenders by Feb. 25.

CLOTHING AND TEXTILES

Bootle, Lancs.—Supply of the following fire brigade uniforms, for B.C.: Patrol suits, reefer jacket and trousers (spec. T65 only); shirts and collars (firemen); shirts and collars (officers); raincoats, lined (firemen); fire tunics (spec. T.9.B. only); socks; officers' undress uniform; officers' raincoats; officers' shoes; firemen's shoes; overalls (bib and brace and jacket); blankets; helmets. In accordance with specifications issued by the Home Office (Fire Service Department) dated 1951, 1954 and 1955. Tenders in plain sealed envelopes, marked "Tender for Fire Brigade Uniform" to Harold Partington, Town Clerk, Town Clerk's Office, Bootle, 20, by March 1.

Dunbartonshire.—Supply of uniform clothing consisting of tunics, trousers, caps, black leather gloves, brown leather gloves, shirts, collars, and ties, for the Constabulary. Documents from the Chief Constable, Police Headquarters, Dunbarton. Tenders by March 5.

Lanarkshire.—Following, for Fire Brigade: Fifty Officers' white poplin shirts; 100 officers' white trubened collars; 400 firemen's blue poplin shirts; 800 firemen's blue trubened collars; 24 firewomen's white poplin shirts; 48 firewomen's white trubened collars; 400 black cashmere wool ties; 15 pairs officers' black shoes; 240 pairs firemen's black shoes; 54 dozen pairs men's black half hose, preferably with nylon spliced heels and in unshrinkable finish. Tenders in accordance with specifications by the Home Office (Fire Service Department), dated 1951, to Alexander H. Nisbet, Firemaster, Fire Brigade Headquarters, Knowetop, Motherwell, by March 22. Samples should be submitted.

Richmond, Surrey.—Supply of uniform and protective clothing, for B.C. Documents from the Engineer and Surveyor, Hotham House, Heron Court, Richmond. Tenders by March 5.

DEMOLITION

Lanarkshire.—Demolition of the schoolhouse at Blackwood, for C.C. Written applications to D. G. Bannerman, county architect, 34 Albert Street, Motherwell, by Feb. 20.

Lichfield, Staffs.—Demolition contract, 1 to 19 Flowers Row, for City Council. Documents from D. Oglesby, city engineer and surveyor, Meredith House, 62 Wade Street, Lichfield. Deposit £1 1s. Tenders by Feb. 26.

Manchester.—Demolition of dwellings, shops and other premises near the junction of London Road and Downing Street, for City Council. Documents from the City Surveyor, Town Hall, Manchester, 2. Tenders by Feb. 29.

Newtown and Llanllwchraen, Monts.—Demolition of four houses in Stone Street, Newtown, for U.D.C. Documents from the Surveyor, Town Hall, Newtown. Tenders by Feb. 27.

Reading, Berks.—Demolition of 6 London Street and the Island Bakery, for B.C. Documents from the Borough Surveyor (P.O. Box 17), Town Hall, Reading. Tenders by Feb. 29.

ELECTRICAL

Ammanford, Carm.—Rewiring and renewal of electrical installations of 73 council houses, for U.D.C. Documents from Engineer and Surveyor, Council Offices, College Street, Ammanford. Deposit £2 2s. Tenders by March 2.

Bridge-Bleas, Kent.—Completion of electrical installations at 27 Council houses, Bleas, for R.D.C. Documents from the Engineer and Surveyor, Council Offices, 41 Old Dover Road, Canterbury. Tenders by March 9.

Cardiff.—Electrical installations in various houses and flats for the period ending Dec. 1961, for City Council. Documents from the City Surveyor, City Hall, Cardiff. Deposit £2 2s. cheque payable to Corporation. Tenders by March 7.

Cardiff.—Electrical installation in new gymnasium block, Cardiff High School for Boys, Newport Road, for City Council. Documents from the City Surveyor, City Hall, Cardiff. Deposit £2 2s. cheques payable to Corporation. Tenders by Feb. 29.

Hastings, Sussex.—Electrical installation to 162 four-storey flats and maisonettes at Halton redevelopment area, for B.C. Documents from the Borough Engineer, 37 Wellington Square, Hastings. Deposit £3 3s. Tenders by March 8.

Lancashire.—Following, for C.C.: Electrical installation at Farnworth Cherry Tree Primary School; electrical installation at Padgate Teachers' Training College, Hostel 8; Extensions to heating installation at Penketh and Sankey County Secondary School. Applications to the County Architect, P.O. Box 26, County Hall, Preston, by 10.30 a.m. Feb. 22.

Manchester.—Electrical installation to Templemead Home for Aged Persons at Woodhouse Park, for City Council. Documents from City Architect, P.O. Box 488, Town Hall, Manchester. Tenders by March 14.

Newton Abbot, Devon.—Maintenance of electrical wiring, fittings, etc., in existing Council houses for a period expiring in March 31, 1961, for R.D.C. Documents from the Engineer and Surveyor, Kingsteignton Road, Newton Abbot. Tenders by March 1.

FENCING

Chislehurst and Sidcup, Kent.—Reinstate- ment of fences to 64 houses, for U.D.C. Documents from the Housing Manager, Council Offices, Sidcup. Tenders by Feb. 26.

Manchester.—Supply and delivery of pedestrian guard rails for Piccadilly, comprising approx. 625 lin. yd. of straight and curved lengths, for City Council. Documents from the City Surveyor, Town Hall, Manchester, 2. Tenders by Feb. 26.

Stroud, Glos.—Erection of chain link fencing at London Road depot, for U.D.C. Tenders by March 1.

GAS AND WATER SUPPLY

Chesterton and St. Ives.—Sinking borehole, Bourn pumping station, for the Joint Water Board. Deposit £2 2s. Tenders by March 15.

Deben, Suffolk.—Supply and installation of water softening plant at the pumping station at Pettistree, for R.D.C. The plant is to be a base exchange type, capable of treating raw water having a total hardness of 430 p.p.m. and reducing this to a resultant distributed hardness of 150 p.p.m. at flow rates of up to 22,000 gallons per hour. Documents from the Engineer and Surveyor, Council Offices, Melton Hill, Woodbridge. Deposit £2 2s. Tenders by March 18.

Dorchester.—Laying water main, for B.C. Deposit £2 2s. Tenders by March 12.

Downpatrick, Down.—Installation of water supply, drainage, etc., at various housing sites, for R.D.C. Documents from Engineer's Office, Quoile Road, Downpatrick. Tenders by March 9.

Kilkeel, Down.—Following works, for R.D.C.: (1) Construction of 100,000-gallon reinforced concrete service reservoir at Ballymagough; (2) construction of 6,000-gallon reinforced concrete break pressure tank at Moyad, together with all ancillary site works, contract 6. The works are situated approximately four miles north-west of Kilkeel. Documents from the offices of the consulting engineers, R. Ferguson and S. McIlveen, 15 College Gardens, Belfast, or the Council Offices, Kilkeel. Deposit £5 5s. Tenders by March 2.

Lancaster.—Excavation of trenches and the laying of water mains within the area of supply of the Lancaster Corporation Water Undertaking, for City Council. Documents from the City Water Engineer, Town Hall, Lancaster. Deposit £1. Tenders by Feb. 26.

Leeds.—Construction of cast-iron main from Spens Gardens to Tongue Lane, for City Council. Deposit £3 3s. Tenders by March 4.

Leeds.—Construction, completion and maintenance of approximately two miles of 24in. diameter cast-iron main and other works connected therewith from Spens Gardens, West Park, to Tongue Lane, Meanwood, for City Council. The contract does not include the supply of cast-iron pipes and fittings. Documents from Kenneth L. Forster, general manager and engineer, Waterworks Department, Civic Hall, Leeds, 1. Deposit £3 3s. Tenders by March 4.

Lisburn, Antrim.—Supply of pipes and specials for approximately 4,200yd. of 12in. internal diameter spun-iron class B gas main, for U.D.C. Documents from R. C. Newell, clerk, Council Offices, Lisburn. Tenders by March 7.

Liverpool.—Construction in the Tryweryn Valley, Merionethshire, of earth dam some 150ft. high and containing some 3,000,000 cu. yd. of materials together with tunnels, concrete structures and ancillary works, for City Council. Documents from Binnie, Deacon and Gourley, Artillery House, Artillery Row, Westminster, London, S.W.1, between March 1 and April 1. Deposit £5 payable to City Treasurer Tenders by May 16.

Magherafelt, Londonderry.—Provision of plumbing installations and water supplies to six houses at Lisnamuck, for R.D.C. Documents from W. and M. Given, architects, 1 Waterside, Coleraine. Tenders by Feb. 25.

Malvern, Worcs.—Construction of a small pumping station at Linridge, near Bromes-

berrow (contract 5), for U.D.C. Documents from the Council's Surveyor, The Council House, Malvern. Deposit £5 5s. Tenders by March 4.

Merionethshire.—Construction of Tryweryn Valley dam, for Liverpool City Council. Deposit £5. Tenders by May 16.

North Shields, Northumb.—Supply and installation at the several sites of the following flow metering equipment, contract 16, for Coquet Water Board: (i) One recorder and transmitter for use in connection with a standing wave flume; (ii) one rectangular wier with recorder and transmitter; (iii) one rectangular weir with recorder and transmitter; (iv) eight differential pressure measuring devices for incorporation in pipelines of sizes 36in., 30in., 24in. and 18in. diameters, together with recorders and transmitters; (v) two mechanical meters; (vi) one instrument panel; (vii) ancillary equipment for the above. Documents from S. G. Barrett, engineer and manager of The Coquet Water Board, P.O. Box 104, Pilgrim Street, Newcastle upon Tyne. Tenders by March 14.

Pontardawe, Glam.—Construction of a water supply scheme at Felindre, for R.D.C. The work comprises the provision and laying, mainly in fields, of approximately 1,035 lin. yd. of 3in. diameter asbestos-cement rising main, 650 lin. yd. of 3in. diameter asbestos-cement and 384 lin. yd. of 1in. diameter Alkathene distributing mains, the construction of a pumping station and service reservoir. Documents from D. S. F. Williams, engineer, Council Offices, Pontardawe. Deposit £5. Tenders by March 10.

Ross and Whitchurch, Herefs.—Carrying out stage two of comprehensive water supply scheme (contract 8), for R.D.C. Deposit £5 5s. Tenders by March 14.

Staffordshire.—Shootershill reservoir, contract 55, for Potteries Water Board. Construction of a watertight reinforced concrete reservoir of 2,000,000 gallons capacity in four units of 500,000 gallons at Sandon Road, near Longton, Stoke-on-Trent. Documents from C. V. Brown, engineer and manager, Albion Street, Hanley, Stoke-on-Trent. Deposit £5 5s. cheque. Tenders by March 14.

Uttexeter, Staffs.—Laying water main, Stafford Road to Balance Hill, for U.D.C. Deposit £3. Tenders by March 3.

HEATING AND VENTILATING

Cardiff.—Installation of heating and allied services at Canton Grammar School, Fairwater Road, for City Council. Documents from the City Surveyor, City Hall, Cardiff. Deposit £2 2s. (cheques payable to Corporation). Tenders by March 1.

Cornwall.—The heating, hot and cold water services sub-contract, to ambulance station, Barn Lane, Bodmin, for C.C. Applications to the Architect, County Hall, Truro, by Feb. 20.

Cumberland.—Installation of two steam boilers (each with a capacity of 1,600lb. steam/hr.) and a condense return system of pipework, at Highfield House, Wigton, for C.C. Documents from John H. Haughan, county architect, 15 Portland Square, Carlisle. Tenders by March 16.

HOUSING SCHEMES

Atcham, Salop.—Erection of blocks of single bedroom houses, four houses per block as under, for R.D.C.: Four blocks at Upper Pulley, Bayson Hill; four blocks at Cross Houses; four blocks at Pontesbury. Documents from the Council's Engineer and Surveyor, 24 St. John's Hill, Shrewsbury. Tenders by March 4.

Boston, Lincs.—Thirty houses and 20 bungalows in Arbeila Road, Wellington Road, Winslow Road and Woad Farm Road, for B.C. Documents from the Borough Engineer, Municipal Buildings, Boston. Deposit £2 2s. Tenders by Feb. 27.

Cornwall.—Two police houses, with office and garage at Probus, for C.C. Applications to the Architect, County Hall, Truro, by Feb. 20. Deposit £3 3s. Tenders by March 19.

Edmonton, Middx.—Nine-storey block comprising 40 maisonettes and five dwellings for aged persons and 48 garages in three blocks within the borough, for B.C. Applications by first post, Feb. 29. Deposit £2 2s. Tenders by March 21.

Fifeshire.—Following, for C.C.: Four traditional houses at Auchtertool, fifth development; seven traditional houses at Strathmiglo, 11th development. Applications to the County Clerk, Cupar, Fife, by Feb. 20.

Fifeshire.—One headmaster's and one janitor's house at St. Paul's R.C. School, Glenrothes, for C.C. Applications to the County Clerk, Cupar, Fife, by Feb. 20.

Haverfordwest, Pembs.—Following, for R.D.C.: (a) Llangwm 5 housing site—erection of six bungalows, together with site works; (2) Llanfairantydf (Trecwm) 11 housing site—erection of six bungalows, together with site works. Documents from

the Surveyor, Council Offices, 8-10 Picton Place, Haverfordwest. Tenders by March 11.

***Keswick, Cumb.**—Erection of 20 aged persons' flats, for U.D.C. Apply by Feb. 27.

Long Eaton, Derbys.—Four pairs of three-bedroom houses at Longmoor Road, together with 80 lin. yd. of roadworks, for U.D.C. Documents from F. Turner, engineer and surveyor, Town Hall, Long Eaton. Tenders by March 6.

Middlesbrough.—Following, for B.C.: (a) Ten bungalows, 32 flats and four houses on site adjoining Albert Cock's Home, Rainford Crescent, Thorntree; (b) 20 houses, group 27, Pallister Park; (c) 10 police houses, group 20, Easterside. Documents from the Engineer, Municipal Buildings, Middlesbrough. Deposit £2 2s. each. Tenders by March 7 for (a) and (b), and March 8 for (c).

Pembroke, Pems.—Two pairs of bungalows type O.P. 7a, together with all necessary site works complete at Milton Village housing site, for R.D.C. Documents from J. Owen Parry and Lewis, architect, Ammanford. Deposit £3 3s. Tenders by March 9.

Reading, Berks.—Five dwellings and one garage at Wychotes, St. Peters Avenue, Caversham, for B.C. Documents from the Architect, Town Hall, Reading. Deposit £2 2s., cheques payable to Corporation. Tenders by March 14.

Swinton and Pendlebury, Lancs.—Two bungalows, with electrical floor heating, for B.C. Documents from the Borough Engineer, Town Hall, Swinton. Tenders by Feb. 29.

Swindon, Wilts.—Sixty-three and 52 traditional dwellings and a number of garages in the Park neighbourhoods, for B.C. Applications to the Architect, Civic Offices, Swindon, by Feb. 24.

Thornbury, Glos.—Site preparation works and erection of 36 dwellings at Upper Bath Road and Chapel Street, for R.D.C. Separate documents from Rainger, Rogers and Smithson, architects, Glenmore Lodge, Wellington Square, Cheltenham, Glos., by Feb. 20. Deposit £3 3s. each.

***Wandsworth.**—Flats in St. Alphonsus Road, for B.C. Apply by Feb. 25.

Whiston, Lancs.—Four aged persons bungalows of traditional construction on a site at Pepper Street, Hale, for R.D.C. Documents from Acting Engineer and Surveyor, Council Offices, Delph Lane, Whiston, Prescot. Tenders by March 9.

MATERIALS AND SUPPLIES

Armagh.—Provision of the following, from April 1, 1960, to March 31, 1961, for U.D.C.: (1) Electrical and plumbing work; (2) maintenance of town clocks; (3) stone, tarmac, bitumen macadam, sand, cement and cement products, earthenware pipes, miscellaneous hardware, protective clothing, rubber boots, etc. Documents from V. M. Conran, clerk, City Hall, Armagh. Tenders by March 7.

Ayrshire.—Following for C.C.: Liquid bitumen for (a) making bituminous macadam, (b) making bituminous carpets, (c) road dressing; tar for spraying; asphaltic bitumen road emulsion, oils and grease; road tools; paper and board; duplicating materials (paper, stencils, ink, etc.); disinfectants (for all properties of the County Council). Documents from the County Clerk, Supplies Department, County Buildings, Ayr. Tenders by Feb. 24.

***Berwick-upon-Tweed, Northumb.**—Supply of materials, for B.C. Tenders by March 14.

Birmingham.—Supply of dustbins, for City Council. Tenders by Feb. 29.

Blackburn, Lancs.—Supply and fixing of apparatus and equipment for gymnasium of a new secondary school, for B.C. Documents from Chief Education Officer, Library Street, Blackburn. Tenders by Feb. 27.

Cheadle and Gatley, Cheshire.—Supply of the following materials for the year April 1, 1960 to March 31, 1961, for U.D.C.: Bituminous macadam; concrete flags, kerbs and channels; earthenware pipes and other earthenware materials; cement; broken stone; cold asphalt; washed river sand; scavenging brushes; bristling mechanical sweeper brushes; electric lamps; lanterns; swan-neck brackets; switching gear boxes; concrete lighting columns. Documents from Duncan S. Graham, engineer and surveyor, Town Hall, Abbey, Cheadle, on receipt of a stamped addressed envelope. Tenders by March 12.

Chesterfield, Derbys.—Following, for the year commencing April 1, 1960, for B.C.: (1) Slag, limestone and basalt tarmac; (2) slag, limestone and basalt bitumen macadam; (3) pre-mixed waterbound macadam; (4) special surfacings, e.g., cold asphalt; (5) sealing grit; (6) dry slag, limestone, granite, gravel and basalt chippings; (7) cold bituminous emulsions; (8) hot tar; (9) precast paving slabs; kerb, channel and edgings; (10) cement and sand; (11) salt glazed ware pipes, specials, gullies, etc.; (12) concrete pipes, specials, gullies, etc.; (13) man-hole covers, gully grates, etc. Documents from

Borough Engineer, Town Hall, Chesterfield. Tenders by Feb. 29.

Chorley, Lancs.—Following during the year ending March 31, 1961: (1) Bitumen macadam and cold asphalt; (2) bitumen macadam and cold asphalt laid by machine; (3) asphaltic base course; (4) asphaltic base course laid by machine; (5) hot rolled asphalt laid by machine; (6) mastic asphalt laid (footpaths); (7) premixed water-bound macadam; (8) burnt and colliery shale for road foundations; (9) loaded bitumen; (10) granite chippings; (11) concrete kerbs; (12) concrete flags; (13) laying concrete kerbs and flags and sett paved channel; (14) bitumen emulsion; (15) concrete aggregate coarse and fine; (16) building sand; (17) earthenware pipes, gullies, etc.; (18) concrete pipes and gullies; (19) gully gratings and frames; (20) manhole frames and covers; (21) electric lamps; (22) covering down materials for controlled tipping; (23) bituminous macadam for house footpaths laid; (24) surface dressing; (25) tarmac; (26) precoated chippings. Documents from the Engineer, Town Hall, Chorley. Tenders by Feb. 23.

Colchester, Essex.—Supply of the following for 12 months from April 1, 1960, to March 31, 1961, for B.C.: Broken granite; kettling iron slag; tar and bitumen macadam; cement; glazed stoneware pipes; concrete pipes and gullies; precast concrete paving slabs and kerbs. Documents from J. S. Orchard, borough engineer, 1 West Stockwell Street, Colchester. Tenders by Feb. 29.

Crompton, Lancs.—Following for the year ending March 31, 1961, for U.D.C.: (1) Salt; (2) broken stone; (3) concrete flags, kerb and edging; (4) sand; (5) stoneware pipes; (6) dustbins; (7) tar and bituminous macadam; (8) cold emulsion; (9) sweeper/collector (Karrer) brush refills; (10) cement; (11) cold asphalt; (12) iron castings; (13) electric lamps; (14) ground lime; (15) coke; (16) petrol. Documents from the Engineer and Surveyor, Town Hall, Shaw. Tenders by Feb. 26.

Dartford, Kent.—Following for year ending March 31, 1961, for R.D.C.: Schedule A comprising road-making materials, lorry hire and plant hire; schedule B comprising petrol, gas oil and fuel oil. Documents from the Engineer and Surveyor, White Oak, Swanley, Kent. Tenders by Feb. 25.

Dunbartonshire.—Supply of the following furniture, etc., required for the New Academy, Lenzie, for C.C.: (a) Classroom tubular combined desks, technical benches, assembly hall chairs, etc.; (b) curtains; (c) portable gymnastic apparatus. Applications in writing to the Director of Education (Supplies Department), 18 Park Circus, Glasgow, C.3. Tenders by March 7.

Dunstable, Beds.—Following for the year ending March 31, 1961, for B.C.: (1) Tarmac; (2) fine cold asphalt (slag aggregate); (3) concrete aggregates; (4) building sand; (5) ashes; (6) spent ballast; (7) precast concrete kerb; (8) precast concrete flags. Documents from the Engineer and Surveyor, Municipal Offices, Dunstable. Tenders by Feb. 27.

Ipswich.—Supply of approximately 2,500 gallons of paint during the year commencing April 1, 1960, for B.C. Documents from the Borough Engineer and Surveyor, 19 Tower Street, Ipswich. Tenders by Feb. 29.

Larne, Antrim.—Following, for B.C.: (1) Cement; precast concrete products, bricks, glazed ware pipes, mortar, etc.; (2) sand; (3) stones, screenings, etc.; (4) bituminous macadam; (5) general hardware, tools, etc.; (6) coal, coke, etc.; (7) spun-iron pipes and special castings; (8) valves and waterworks fittings; (9) clock winding and repairs; (10) plumbing work (repairs and maintenance); (11) electrical work (repairs and maintenance). Documents from the Borough Surveyor, Victoria Road, Larne. Tenders by Feb. 25.

Leyton, Essex.—Supply of the following materials for the year ending March 31, 1961, for B.C.: Concrete flagging, edging and kerbing; sand, ballast, etc.; tarmac; clinker and ashes; window cleaning. Documents from the Borough Engineer, Town Hall, Leyton, E.10. Tenders by March 5.

Lincoln.—Supply of materials, for City Council. Tenders by Feb. 26.

Llchwyr, Glam.—Following for the period of 12 months ending March 31, 1961, for U.D.C.: Surface dressing of roads, bituminous macadam and treated macadam, walling stone, chippings, concrete kerbing, cement, sand, bricks, mortar, casting, motor haulage tools and implements, ironmongery (including baths, sinks, copper cylinders, etc.), hardcore, ready mixed concrete, and timber. Documents from J. Vaughan Williams, engineer, Council Offices, Gorcenon. Tenders by March 3.

Lowestoft, Suffolk.—Supply of materials, for U.D.C. Tenders by March 14.

Lowestoft, Suffolk.—Supply of materials, for B.C. Tenders by March 12.

Magherafelt, Londonderry.—Supplying and delivering, carriage paid to the store at Railway Road, materials and fittings as follows, for R.D.C.: (1) Sanitary plumbing materials; (2) timber, windows, doors and glass; (3) cookers, parts and fireplaces; (4) paint, etc.; (5) tools and implements; (6) concrete blocks, stones, fencing posts, gravel and sand; (7) general builders' supplies, bins, buckets, etc.; (8) "Cointex." Documents from the Council Offices, Magherafelt. Tenders by March 21.

Manchester.—Supply of approximately 300,000 gallons of tar for tarspraying during the period April 1 to Oct. 31, 1960, for City Council. Documents from the City Surveyor, Town Hall, Manchester, 2. Tenders by Feb. 24.

Manchester.—Supply of the following materials during the 12 months commencing April 1, 1960: (a) Granite, basalt and white limestone chippings for tarspraying; (b) rolled asphalt (not process), cold bituminous macadam, not bituminous macadam, low penetration not bituminous macadam, hot asphalt, sand carpet and sealing grit. Documents from the City Surveyor, Town Hall, Manchester, 2. Tenders by Feb. 24.

Newtownabbey, Antrim.—Following for the year ending March 31, 1961, for U.D.C.: (1) Hardware; (2) petrol, burning, oil, derv, lubricating oils, grease, etc.; (3) road metal; (4) sand, concrete blocks, bricks and cement; (5) precast concrete compressed flags and kerbs; (6) salt glazed ware pipes and concrete pipes; (7) concrete road gules and cast-iron and steel frames and gratings; (8) fluorescent street lamps. Documents from the Surveyor, Town Hall, Whitenouse, Newtownabbey. Tenders by Feb. 29.

Ormskirk, Lancs.—Following, for U.D.C.: (1) Tarred slag and limestone macadam; (2) bituminous wearing coat and sand carpet; (3) tar and tar compounds; (4) granite chippings; (5) artificial stone flags and kerbs; (6) rubble stone, sand and ashes; (7) stoneware pipes and gullies. Documents from the Engineer and Surveyor, Council Offices, Burscough Street, Ormskirk. Tenders by March 4.

Oxford.—Supply of petrol and diesel oil to various establishments for a period of two years commencing April 1, 1960, for City Council. Documents from Harry Plowman, town clerk, Town Hall, Oxford. Tenders by March 4.

Queensbury and Shelf, Yorks.—Supply of the following during the 12 months ending March 31, 1961, for U.D.C.: (1) Granite and limestone chippings; (2) tarmac; (3) tar surface dressing; (4) flags and keros (pre-cast); (5) Portland cement; (6) sand and gravel. Documents from J. F. Hall, engineer and surveyor, Council Offices, Albert Road, Queensbury, near Bradford. Tenders by Feb. 29.

***Rawtenstall, Lancs.**—Supply of materials, for B.C. Tenders by March 5.

***Rotherham.**—Supply of materials, for B.C. Tenders by Feb. 29.

Rotherham, Yorks.—Supply of 2,500 gallonised dustbins, 3½ cu. ft. capacity weighing complete with lid 28lb., and complying with B.S.S. 792 of 1947, for B.C. Documents from Borough Engineer, Municipal Offices, Rotherham. Tenders by Feb. 29.

***Saltash, Corn.**—Supply of road materials, for B.C. Tenders by Feb. 25.

Staffordshire.—Supply of petrol, derv and gas oil in bulk to be delivered to County owned pumps at various points in the County during the period April 1, 1960, to March 31, 1961, for C.C. The successful tenderer will also be required to arrange for County owned vehicles to obtain petrol and derv from suppliers to be agreed in areas in the County in which there are no County owned pumps. Documents from T. H. Evans, clerk of the County Council, County Buildings, Martin Street, Stafford. Tenders by Feb. 17.

Stanley, Dur.—Supply of electrical materials for the year ended March 31, 1961, for U.D.C. Documents from J. J. Shipston, clerk of the Council, Council Offices, Stanley. Tenders by Feb. 27.

Sutton-in-Ashfield, Notts.—Following for the year ending March 31, 1961, for U.D.C.: Tarred macadam; bituminous macadam; bituminous macadam laid by Barber-Greene spreader; tar and bituminous compounds; cement; concrete flags and kerbs; stoneware pipes; street gullies; gully grids and frames; gravel and ballast; sand; fine cold asphalt; dry limestone or slag chippings; ready mixed concrete. Documents from Ian L. McCallum, surveyor, Council Offices, Forest Lodge, Station Road, Sutton-in-Ashfield. Tenders by March 2.

Walton-le-Dale, Lancs.—Following for the financial year 1960-61, for U.D.C.: (1) Granite chippings; (2) limestone chippings; (3) concrete kerbs and channels; (4) concrete flags; (5) glazed ware pipes; (6) cinders and steelworks slag; (7) sand and gravel. Documents

from the Engineer and Surveyor, Council Offices, Bamber Bridge. Tenders by Feb. 24.

Wandsworth.—Supply of precast concrete beams for the reconstruction of the Dunthill Road Bridge, which has a clear span of 40ft. (41ft. 6in. skew span), for B.C. Documents from the Borough Engineer, Municipal Buildings, Wandsworth, S.W.18. Tenders by March 9.

Westhoughton, Lancs.—Supply of the following for year ending March 31, 1961, for U.D.C.: Natural stone kerbs and channels; granite chippings; concrete kerbs and channels; concrete flags; tarred and bituminous macadam; refined tar and cold emulsion; limestone chippings; concrete aggregates; cement; stoneware pipes and gullies; uncoated graded stone; cold asphalt; electric lamps; petroleum spirit and diesel oil; dustbins; tarspraying. Documents from the Surveyor, or, for dustbins, the Chief Public Health Inspector, Town Hall, Westhoughton, Bolton, on receipt of a.s.e. Tenders by March 4.

Whiston, Lancs.—Supply of the following items for the 12 months commencing April 1, 1960, for R.D.C.: (1) Sand and concreting aggregate; (2) Portland cement; (3) bricks; (4) precast concrete kerbs and edgings; (5) precast concrete flags; (6) concrete pipes and gullies; (7) cast-iron manhole covers and frames and gully grids and frames; (8) salt-glazed pipes and gullies; (9) burnt colliery shale; (10) ashes; (11) pitching; (12) wetmix; (13) tarmacadam; (14) bituminous macadam; (15) cold asphalt; (16) sand carpet and other similar products; (17) bitumen emulsion; (18) tools. Documents from A. J. Bebbington, acting engineer and surveyor, Council Offices, Delph Lane, Whiston. Tenders by Feb. 26.

Wigan, Lancs.—Following for the year ending March 31, 1961, for B.C.: (1) Grate parts; (2) ironmongery; (3) lead; (4) plumbing materials; (5) paint brushes; (6) glass. Documents from the Borough Engineer, Municipal Buildings, Library Street, Wigan. Tenders by March 1.

Worksop, Notts.—Following during the year commencing April 1, 1960, for B.C.: (1) Common bricks; (2) bituminous emulsions; (3) Rebitting of sweeper brushes; (4) cement; (5) concrete kerb and flags; (6) sand and gravel; (7) dry, tarred and bituminous slag; (8) pitching and binding stone; (9) road tar; (10) hire of lorries; (11) salt; (12) liquid chlorine; (13) stoneware pipes and fittings; (14) coal; (15) soiled or rock salt; (16) winter grit; (17) truck-mixed concrete; (18) premixed water-bound macadam; (19) oversalls; (20) red shale. Documents from the Borough Engineer, Park House, Worksop. Tenders by Feb. 29.

PLANT AND MECHANICAL TRANSPORT

Blackpool, Lancs.—Supply and delivery of one loading shovel with $\frac{1}{4}$ cu. yd. 25cwt. bucket, four-wheel drive, each wheel of equal size; planetary reduction gear on all wheels, diesel engine, torque conversion and power steering, for B.C. Documents from Borough Surveyor, Municipal Offices, Blackpool. Tenders by Feb. 22.

Dearne, Yorks.—Supply of one new 2/3-ton (7 cu. yd. capacity) Karrier Bantam refuse collecting vehicle, for U.D.C. Vehicle to comprise low-loading chassis, 25 by 6 heavy duty pneumatic tyres, twin rear and spare wheel; fitted with four-cylinder diesel oil engine; 12-V lighting, self starter, etc., twin electrical wipers, dual driving mirrors; all-steel body for refuse, with semi-circular sliding steel dust covers, double opening rear doors, power hydraulic end-tipping gear. Vehicle to be painted and lettered to the Chief Public Health Inspector's choice. All other details of construction of vehicle to be to the manufacturer's specification. Vehicle, complete with aluminium number plates and two licence holders, to be delivered to the Council's Depot. Tenders to C. Bishop, clerk, Council Offices, Bolton-on-Dearne, by Feb. 29.

Enniskillen, Fermanagh.—Supply and delivery of one Wallwin series 1090/11 non-chokeable horizontal pump mounted on trailer, for R.D.C. Documents from Engineer and Surveyor, Council Offices, Corgrade, Enniskillen. Tenders by Feb. 26.

Northern Ireland.—Supply, delivery and erection at Coolkeeragh power station, Londonderry, of one set of hydrazine hydrate dosing equipment, for Electricity Board. Set of hydrazine hydrate dosing equipment. Documents from the Board's consulting engineers, Kennedy and Donkin, 64 Royal Exchange, Manchester, 2. Deposit £5 5s., cheques payable to the Board. Tenders by March 21.

Paignton, Devon.—Supply and delivery of three 12 cub. yd. capacity refuse collection vehicles, for U.D.C. Documents from the Engineer and Surveyor, Municipal Offices, Oldway, Paignton. Tenders by March 7.

St. Ives, Corn.—Supply of one Bedford diesel engine 3-ton short chassis lorry and cab, for B.C. A 1949 Bedford lorry is offered in part exchange, and this may be seen by

arrangement with the Borough Surveyor. Documents from the Surveyor, the Guildhall, St. Ives. Deposit £1 1s. Tenders by March 8.

PLAYING FIELDS, PARKS, ETC.

Bedfordshire.—Supply and laying of turf together with associated site preparation, for Highways Committee. Applications to the Surveyor, Dents Road, Bedford, by Feb. 27.

Cardiff.—Laying out a playing field at Heol-y-Nant, Gwaelod-y-garth, comprising approx. five acres grading, cultivation, seedling and drainage works, for R.D.C. Documents from S. P. Youldon, engineer and surveyor, 20 Park Place, Cardiff. Deposit £3 3s. Tenders by March 2.

Chelmsford, Essex.—Construction of a cinder running track and facilities for field events, for which the whole of the works must conform to the standards of the Amateur Athletic Association, for B.C. Documents from the Borough Engineer and Surveyor, Municipal Offices, Coval Lane, Chelmsford. Deposit £2 2s. Tenders by Feb. 29.

Hull.—Following, for City Council: (a) The development of approx. 3 acres of playing fields, including the clearing of ditches, cutting of hedges, grading, ploughing, seedling and drainage, at the Sutton Deaf School, East Carr Road, Saltshouse Road, Kingston-upon-Hull, and (b) the construction of six concrete cricket practice wickets and the supply and erection of metal and netting surrounds at the Greatfield Campus School site, Preston Road, Kingston-upon-Hull. Documents from the General Superintendents, Parks, etc., Department, 79 Ferensway, Kingston-upon-Hull. Tenders by March 11.

Lancashire.—The development of playing fields and fencing, etc., at the following, for C.C.: Accrington College of Further Education; Kirkby St. Michaels R.C. Primary School; Litherland St. Wilfrids R.C. Secondary; Lancaster and Morecambe College of Further Education; Terrisholme County Primary School; Lancaster R.C. Secondary School. Applications to the County Architect, P.O. Box 26, County Hall, Preston, by Feb. 26.

ROADS, BRIDGES AND SITE WORKS

***Acton, Middx.**—Resurfacing of school playgrounds, for B.C. Tenders by March 24.

Acton, Middx.—Surface dressing of about 120,000 sq. yd. of carriageways, for B.C. Documents from the Borough Engineer, Town Hall, Acton, W.3. Tenders by Feb. 26.

Amphill, Beds.—Construction of approx. 880 lin. yd. of carriageway, with kerbs, channels, hardcore foundations and tarmacadam surface, earthworks, soil and surface water sewers and watermains at Council's housing estate, Flitwick, stage three, for R.D.C. Documents from the engineer and surveyor, 12 Dunstable Street, Ampthill. Deposit £2 2s. Tenders by March 21.

***Argyllshire.**—Reconstruction of the Strachur-Loch Eck section of the Cairndow-Strachur-Toward Road (A.815), for Scottish Home Department. Deposit £15. Tenders by March 14.

Audenshaw, Lancs.—Provision and laying of approx. 14,000 sq. yd. of dense bituminous macadam wearing coat on Manchester Road, for U.D.C. Documents from Engineer and Surveyor, Council Offices, Ryecroft Hall, Audenshaw. Tenders by Feb. 29.

***Barnes, Surrey.**—Reconstruction of Castelnau, contract V, for B.C. Tenders by March 18.

Birkenhead.—Resurfacing of Park Drive, Lower Park, and the resurfacing of certain interior paths, for B.C. The work will involve scarifying where necessary, laying of approx. 19,000 sq. yd. tarmacadam and approx. 31,500 sq. yd. of fine cold asphalt; the adjustment of approx. 350yd. sandstone kerb and the replacement of approx. 100 gully frames and covers. Documents from the Engineer and Surveyor, Municipal Buildings, 3 Conway Street, Birkenhead. Deposit £5. Tenders by Feb. 25.

Birmingham.—Measure and value contract for the maintenance of joints in concrete-finished carriageways in various roads, for City Council. Documents from the office of Sir Herbert J. Manzoni, city engineer and surveyor, Civic Centre, Birmingham, 1. Deposit £2 2s. (cheque). Tenders by Feb. 24.

***Birmingham.**—Roads and sewers, Kinghurst Hall housing estate, for City Council. Deposit £2 2s. (cheques payable to City Engineer). Tenders by March 2.

Breconshire.—Surface dressing of roads (450,000 sq. yd.), for C.C. Documents from the County Surveyor, Watton Offices, Brecon. Tenders by March 7.

Brighton, Sussex.—Heating and planing approx. 52,000 sq. yd. of carriageway at six different sites in the borough, for B.C. The existing surfaces are either macadam, cold asphalt or tar spray and chippings. Documents from D. J. Howe, borough surveyor, 26-30 King's Road, Brighton. Tenders by Feb. 29.

Burton Latimer, Northants.—Following at Bakehouse Lane housing site, for U.D.C. Construction of approx. 500 sq. yd. of tarmacadam road, 220 yd. of 6in. dia. concrete tube foul sewer and 160yd. of 6in. and 9in. dia. glazed stoneware storm sewer. Documents from the offices of Pick, Everard, Keay and Gimson, engineers, 6 Millstone Lane, Leicester. Deposit £2 2s. Tenders by March 8.

Carlisle.—Construction of roads and sewers at Willow Holme industrial estate, for City Council. The work comprises construction of approx. 2,200 sq. yd. of reinforced concrete carriageway, kerbing, 380 lin. yd. of 9in. and 12in. dia. sewers and ancillary works. Documents from City Surveyor, 18 Fisher Street, Carlisle. Tenders by Feb. 25.

***Colwyn Bay, Denbighs.**—Road surfacing work, for B.C. Tenders by Feb. 29.

Croydon, Surrey.—Following, for B.C.: Supplying materials and surfacing carriageways by an approved mechanical spreader machine for (i) Cold asphalt, approx. 67,250 super. yd.; (ii) rolled asphalt, approx. 12,000 super. yd.; (iii) granite/gravel asphalt base course, approx. 1,400 super. yd.; (iv) bitumen macadam carpet, approx. 6,000 super. yd. Some of these carriageways are required to be burned off and planed before surfacing (approx. 48,000 super. yd.). Documents from the Engineer, Town Hall, Croydon. Tenders by Feb. 29.

Denton, Lancs.—Surfacing of the children's playground at Victoria Park, Denton, to be completed before March 31, 1960, for U.D.C. Documents from the office of the Engineer and Surveyor, Town Hall, Denton. Tenders by March 4.

***Derbyshire.**—Supply of materials, for C.C. Tenders by Feb. 26.

Down.—Following, for C.C.: Construction of a new road of approximately 2,100yd. on the existing disused railway site at Comber between the level crossing on the Comber-Killyleagh road, and a point where the new road shall rejoin the existing Comber-Belfast road of approximately 340yd. of service road, and the widening and realignment of the existing Comber-Killyleagh road from the said level crossing for a distance of approximately 540yd. in the townlands of Town Parks, Ballyloughan and Carnasue. Documents from C. A. Craig, county surveyor, English Street, Downpatrick. Deposit £5 (cheques payable to C.C.). Tenders by March 1.

East Suffolk.—Supply, heating and spraying of approx. 520,000 gallons of tar, tarmacadam and cut-back bitumen, contract 20, for C.C. Documents from the County Surveyor, County Hall, Ipswich. Deposit £2 2s. Tenders by Feb. 29.

Egham, Surrey.—Execution of minor maintenance items on highways, etc., during the year ending March 31, 1961, for U.D.C. Documents from the Engineer and Surveyor, Council Offices, High Street, Egham. Deposit £2 2s. Tenders by March 5.

Enniskillen, Fermanagh.—Resurfacing back road and tarmacadam to terrace at Portora Royal School, for the Board of Governors. Documents from The Bursar, Portora Royal School, Enniskillen. Tenders by March 7.

Flintshire.—Making-up Moel View Road, Gronant (260 lin. yd. approximately), for C.C. Documents from the office of E. W. W. Richards, county surveyor, County Building, Mold. Deposit £2 2s. Tenders by Feb. 22.

Gillingham, Kent.—Surfacing in hot rolled asphalt, for B.C. Deposit £3 3s. Tenders by March 1.

Guildford, Surrey.—Following two contracts for footpaths and forecourts at Park Barn housing site, for B.C.: (a) Laying of approximately 1,320 lin. yd. of 5in. by 10in. kerb; 1,460 lin. yd. of 2in. by 6in. edging kerb; construction of 7,400 sq. yd. of tarmacadam footpaths; 3,800 sq. yd. of garage forecourts in hardcore and bituminous macadam, together with surface water drainage; (b) grading, preparation and seeding of 1.7 acre of house forecourts. Documents from Borough Engineer and Surveyor, Municipal Offices, High Street, Guildford. Tenders by March 2.

Haltemprice, Yorks.—Construction of approx. 870 sq. yd. of tarmacadam carriageway and the laying of approx. 200yd. of 9in. dia. sewers at Kingtree House, Cottingham, for U.D.C. Documents from the Engineer and Surveyor, Anlaby House, Anlaby. Deposit £1. Tenders by Feb. 29.

Harrogate, Yorks.—Making-up of one or more of the following private streets, for B.C.: (a) Firs Avenue, 130 lin. yd.; (b) Firs Drive, 280 lin. yd.; (c) Firs Gate, 130 lin. yd.; (d) Firs Close, 55 lin. yd. The work comprises kerbing and flagging to the footpaths and surfacing the carriageway in tarmacadam and fine cold asphalt. Documents from the office of the Borough Engineer, Municipal Offices, Harrogate. Tenders by Feb. 26.

Hastings, Sussex.—Following, for B.C. Construction at the Ponswood Industrial estate

extension of 3,050 sq. yd. of reinforced concrete carriageway, 810 lin. yd. of foul and surface water sewer maximum size 15in. dia., and incidental works including manholes, etc. Documents from the offices of the Borough Engineer, 37 Wellington Square, Hastings. Deposit £2 2s. Tenders by Feb. 25.

Hazel Grove and Bramhall, Cheshire.—Reconstruction and improvement of Torkington Road, Hazel Grove, a length of approx. 330yds. for U.D.C. Documents from the Engineer and Surveyor, The Council House, Hazel Grove. Deposit £2 2s. Tenders by March 1.

Hazel Grove and Bramhall, Cheshire.—Reconstruction of footpaths and surfacing of carriageways with hot rolled asphalt at Station Street, School Street, and Hatherlow Lane, for U.D.C. Documents from the Engineer and Surveyor at The Council House, Hazel Grove. Deposit £2 2s. Tenders by March 1.

Hendon, Middlesex.—Making-up of Tenterden Close, for B.C., comprising kerbing, hardcore foundation, carriageway surfacing and footway construction. Applications to Engineer and Surveyor, Town Hall, Hendon, by Feb. 20. Deposit £2 2s., cheques payable to Corporation. Tenders by March 7.

Hertfordshire.—Diversion of Hunters Lane, Leavesden, for C.C. Tenders by March 9.

Inverness-shire.—Reconstruction of a section of the Dores-Foyers-Dalclarg Road, for C.C., comprising approx. 350 lin. yd. and comprises an 18ft. carriageway and footpath. Documents from the County Surveyor, County Buildings, Inverness. Deposit £3. Tenders by Feb. 23.

Inverness.—Reconstruction of a section of the Kyleakin-Portree road, route A.850, Skye, for C.C. The length of the section is approximately 3.75 miles and will comprise an 18ft. carriageway including a 96ft. span arch bridge. Documents from the Surveyor, County Buildings, Inverness. Deposit £3. Tenders by Feb. 26.

Lanarkshire.—Following at East Kilbride New Town, for C.C.: Road 1, contract 9, road 2, contract 7; road 4, contract 2. The work comprises the laying of concrete slabbed footpaths, of an area of about 5,150 sq. yd., including necessary ancillary works, together with a brick-faced mass concrete retaining wall of height up to four feet and length about 335 lin. yd. Applications to Col. T. U. Wilson, county surveyor, 19 Auchingramont Road, Hamilton, by Feb. 23. Deposit £5 payable to C.C.

Leatherhead, Surrey.—Making-up Stag Leys, Ashtead, for U.D.C. Documents from Engineer and Surveyor's Department, Red House, Bull Hill, Leatherhead. Tenders by March 9.

Leeds.—Private street works, for City Council. Tenders by March 3.

Llanelli, Carmarthenshire.—Construction of approximately 1,036 sq. yd. of roadway and laying of approximately 104 lin. yd. of sewers on the Western Works site, Station Road, for B.C. Documents from the Borough Engineer, Town Hall, Llanelli. Deposit £2 2s. Tenders by Feb. 27.

London.—Reconstruction of a round-about, for Ministry of Transport. Deposit £15 (cheques payable to the Ministry). Tenders by March 30.

Londonerry.—Sitemarks at the proposed Coast Road caravan site in the townlands of Craigtown Beg and East Ballyglegagh, for C.C. The sitemarks consist of site clearance, provision and construction of sewers and manholes, provision and laying of water mains and distribution pipes, the construction of roads and road drainage, together with fencing and gates. Documents from W. and M. Given, architects and consulting engineers, 1 Waterside, Coleraine. Deposit £3 3s. Tenders by Feb. 26.

Luton, Beds.—Annual maintenance of highways and public works for the year commencing April 1, 1960, for B.C. Documents from Borough Engineer, Town Hall, Luton. Deposit £2 2s. Tenders by Feb. 29.

Manchester.—Supply and laying of the following, for City Council: (1) Rolled asphalt in carriageways; (2) rolled asphalt in footpaths; (3) rolled asphalt in reinstatements to carriageways; (4) rolled asphalt in reinstatements to footpaths; (5) mastic asphalt in footpaths; (6) mastic asphalt in reinstatements; (7) bitumen macadam in carriageways. Documents from the City Surveyor, Town Hall, Manchester. 2. Tenders by March 2.

Manchester.—New tarmac playground at St. Philips C. of E. School, Hulme, for City Council. Documents from City Architect, P.O. Box 488, Town Hall, Manchester. Tenders by Feb. 24.

Manchester.—Cheadle and Gatley overspill area, Councillor Lane, road and sewer contract, for City Council, comprising construction of 13,650 sq. yd. bitumen macadam carriageway, 3,290 lin. yd. of 6in. to 18in. diameter sewer, and all ancillary work. Documents from the City Surveyor (Room 208),

Town Hall, Manchester, 2. Tenders by March 7.

Merionethshire.—Surface dressing of trunk and county highways, for C.C. Tenders by Feb. 22.

Midlothian.—Reconstruction of Clerk Street, Loanhead, for C.C., comprising some 2,000 sq. yd. of leanmix concrete foundations and ancillary works. Documents from the County Surveyor, 32 Palmerston Place, Edinburgh. Deposit £2 2s. Tenders by March 7.

Neath, Glam.—Carriageway and footway completion works at Giants Grave housing site (section 3), for B.C., including tarmacadam surfacing of approx. 1,355 super. yd., and concrete paving of approx. 750 super. yd. of footways, together with other appurtenant works. Documents from D. Bailey, engineer, Gwyn Hall, Neath. Deposit £2 2s. Tenders by March 10.

Northern Ireland.—Construction of Hardstanding and Garage foundations at Cairncastle Road, Larne, for Housing Trust. Documents from the offices of the Trust, 12 Hope Street, Belfast, 12. Tenders by Feb. 22.

Portland, Dorset.—Laying of 2,545 sq. yd. of bituminous macadam and fine grade asphalt surfacing with prepared foundations, on the completed section of a new sea wall, for U.D.C. Documents from E. B. Cullin, engineer and surveyor, Council Offices, Portland. Tenders by Feb. 25.

Rawmarsh, Yorks.—Completion of street works, comprising some 3,000 super. yd. of precast concrete paving and ancillary works, for U.D.C. Documents from J. R. S. Creighton, engineer and surveyor, Council Offices, Parkgate, Yorks. Tenders by Feb. 25.

Rawtenstall, Lancs.—Resurfacing and reconstruction of trunk road, A.56, Burnley Road, Loveclough, for B.C., comprising laying of some 3,117 super. yd. of 2½in. single-course hot rolled asphalt also superelevation works in premixed waterbound macadam, the surfacing to be of some 110 tons of bituminous macadam base course and 1,550 super. yd. of 1½in. hot rolled asphalt wearing course. Documents from the Borough Engineer and Surveyor, Town Hall, Rawtenstall, Rossendale. Tenders by Feb. 29.

Rochford, Essex.—Forming tarmacadam footpaths, kerbing, etc., at Mercer Avenue and Olivers Crescent and a close road, for R.D.C. The works will consist of approximately 3,200 sq. yd. of tarmacadam footpaths, 250 sq. yd. of 5in. concrete carriageway, 35 lin. yd. of 9in. surface water sewer and all appurtenant works. Documents from the Engineer and Surveyor, Council Offices, Rochford. Deposit £2 2s. Tenders by March 1.

Royton, Lancs.—Renewal of kerbing and flagging of footways, and the supply of all materials during the year to March 31, 1961, for U.D.C. Documents from the Surveyor, Town Hall, Royton. Tenders by Feb. 29.

Slough, Bucks.—Tenders are invited for carrying out the following works in 1960-61, for B.C.: Footway and carriageway construction, kerbing and incidental works, surface water drainage and sewerage works. Documents from Engineer, Town Hall, Slough. Deposit £2 2s. Tenders by March 2.

Staffordshire.—Making-up of following, for C.C.: (1) Adamthwaite Drive, off Uttoxeter Road, Blythe Bridge (length 437yds.); (2) Bidegate Drive, off Grindley Lane, Blythe Bridge (length 400yds.); (3) Queen Street, off Wereton Road, Audley (length 81yd.). The work includes excavation, providing two layers of 2in. broken stone to 6in. depth laid on 3in. ashes, and surfacing of 3in. bituminous macadam, p.c. concrete kerbs, footpaths of bituminous macadam and cold asphalt and incidental works, the provision of stoneware surface water drains with brick manholes and gullies. Documents from T. H. Evans, clerk to the Council, County Buildings, Stafford. Deposit £5. Tenders by March 3.

Steeney.—Following works, for B.C.: Supplying and laying asphalt paving, as required, for a period of 12 months from April 1, 1960. Documents from the Engineer and Surveyor, 227-233 Commercial Road, E.1. Deposit £2 2s. Tenders by Feb. 29.

Stepney.—Following works, for B.C.: Schedule A—the removal of surplus spoil and/or hardcore from demolished buildings and constructional works; schedule B—the removal of surplus spoil and/or hardcore from street works, sewer works, foundations and/or excavations. Documents from the Borough Engineer and Surveyor, 227-233 Commercial Road, E.1. Deposit £2 2s. Tenders by Feb. 29.

Stockport, Cheshire.—Construction of garage site works on housing estates, for B.C. The work comprises excavation, drainage, levelling, surfacing, concrete base slabs, fencing, and other incidental works. Documents from

Borough Surveyor, Town Hall, Stockport. Tenders by Feb. 29.

Sunbury-on-Thames, Middx.—Improvement of Gaston Bridge Road, for U.D.C. Tenders by March 7.

Sutherlandshire.—Road and bridge works, construction, reconstruction and surfacing, Ullapool - Ledmore - Lochinver Road, routes A.835/A.837, section: Knockan-Ledmore-Lyne, approximately five miles, contract 18, for C.C. Documents from the office of the County Road Surveyor, Brora. Deposit £3 3s., cheques payable to C.C. Drawings also seen at the offices of: The Scottish Home Department (Roads Division), Bankhead Avenue, Sighthill, Edinburgh, 11; The Scottish Home Department (Roads Division), 33 Academy Street, Inverness. An engineer will meet contractors at 11 a.m. on Feb. 23 at Ledmore Junction to show them over the route. Tenders by March 15.

Twickenham, Middx.—Making-up of Coombe Crescent, Coombe Road and South Road, Hampton, for B.C. Deposit £2 2s. Tenders by March 7.

Wandsworth.—Providing and laying 4,600yds. roughcoat asphalt and 58,000yds. bitumen macadam on underlay where necessary, for B.C. Documents from the Borough Engineer, Municipal Buildings, Wandsworth, S.W.18. Deposit £2 2s. Tenders by March 9.

Wanstead and Woodford, Essex.—Provision and laying by machine of approx. 9,200 sq. yd. of fine cold asphalt as surfacing to existing carriageway of Lake House Road, together with appurtenant works, for B.C. Documents from the Engineer and Surveyor, Municipal Offices, High Road, E.18. Deposit £2. Tenders by Feb. 29.

Whitstable, Kent.—Tenders are invited for the making-up and surface water sewerage of the following, for U.D.C.: Marine Crescent—length 2,200ft. approx.; Priest Walk—length 505ft. approx.; Princess Road (part of)—length 749ft. approx.; St. Swithin Road (part of)—108ft. approx. Comprising the construction of concrete carriageways, footway paving with tarmacadam verges, and the construction of surface water sewers. Documents from the Engineer and Surveyor, The Castle, Whitstable. Tenders by Feb. 29.

Wirral, Cheshire.—Making-up of Florence Avenue, Heswall, for U.D.C. Documents from the Engineer and Surveyor, Council Offices, Heswall. Tenders by March 11.

SEWERAGE, SEWAGE AND REFUSE DISPOSAL

Barnstaple, Devon.—Construction of approx. 180 lin. yd. of 6in. sewer (with four manholes) at Cloutman's Lane, Croyde, for R.D.C. Documents from Engineer and Surveyor, Council Offices, The Red House, Castle Street, Barnstaple. Deposit £2 2s. Tenders by Feb. 29.

Chesterton, Cambs.—Impington sewerage scheme, for R.D.C. Deposit £2 2s. Tenders by March 7.

Corby, Northants.—Construction of 530yds. of 6in. diameter foul and surface water sewers with manholes and ancillary works, for Hodd Court sewerage, for U.D.C. Documents from Clerk of the Council, Council Offices, Corby. Deposit £1 1s. Tenders by March 4.

Downpatrick, Down.—Construction of approximately 390 lin. yd. of 6in. and 9in. diameter sewers, supplying and laying 27 lin. yd. spun-iron pipes, together with manholes, and the construction of a sludge tank and outfall, at Quoile Quay, for R.D.C. Documents from the Council Offices, Downpatrick. Deposit £3 3s. Tenders by March 9.

Fareham, Hants.—Western Wards main drainage, for U.D.C., comprising the construction of approx. 10,300 lin. yd. of 6in. to 24in. diameter stoneware, concrete and spun-iron pipe sewers including a tidal outfall together with the necessary manholes, etc.; the construction of a screening and disintegrator station and a small pumping station in reinforced concrete and all appurtenant works. Documents from Waterhouse and Routhwaite, consulting engineers, 165 Westmorland Road, Newcastle upon Tyne, 4. Deposit £5 5s. Plans also seen at the offices of Engineer and Surveyor, Westbury Manor, Fareham. Tenders by March 10.

Gipping, Suffolk.—Claydon and Great Blakenham sewerage scheme, for R.D.C., comprising: Construction, testing and maintenance of spun-iron, concrete and glazed stoneware sewers, three pumping stations, asbestos cement pumping mains, manholes and all other works incidental thereto. Documents from Lemon and Blizard, consulting engineers, 59 Tufton Street, Westminster, S.W.1. Deposit £5 5s., cheque payable to R.D.C. Tenders by March 14.

Halifax, Yorks.—Supply and erection at the sewage works of elevated steel hoppers of approx. 2,000 cu. ft. total capacity, for B.C. Documents from the Manager, Sewage Department, Salterhebble, Halifax. Tenders by March 14.

Hawarden, Flint.—Construction of Higher Kinnerton sewerage and sewage disposal, comprising the provision, laying and jointing of about 420 lin. yd. of 9in. diameter and 750 lin. yd. of 6in. diameter glazed stoneware pipes and 180 lin. yd. of 6in. diameter iron pipes, together with the construction of a small sewage disposal works consisting of primary and secondary tanks, filter beds and sludge drying beds. The works are situated about five miles west of Chester. Documents from Elliott and Brown, consulting engineers, Stanley House, Pelham Road, Nottingham. Deposit £5 5s. (cheques payable to R.D.C.). Tenders by March 5.

Irvine, Ayr.—Construction of approx. 700 lin. yd. of 30in. diameter and 70 lin. yd. of 27in. diameter concrete sewer with manholes and ancillary works for the first development of the Eglinton housing site, contract 1, for B.C. Documents from R. W. Morrison, burgh surveyor, Heathfield, 5 Kilwinning Road, Council Offices, Heswall. Tenders by March 11.

Kirkcaldy, Fife.—Construction of sewers, manholes and ancillary drainage works at Dunnikier Park estate, for B.C. The work will include the construction of 1,250 lin. yd. of sewers from 9in. to 24in. diameter. Documents from the Burgh Engineer, Town House, Kirkcaldy. Tenders by Feb. 29.

Lothian, Suffolk.—Contract 7 Wangford sewerage, for R.D.C. Construction of 6in. cast-iron glazed stoneware and pitch fibre sewers, manholes, 4in. rising mains, two pumping station and sewage disposal works comprising sedimentation tank, filter, two humus tanks and four sludge drying beds, at Wangford. Documents from the offices of A. P. I. Cotterell and Son, engineers, 54 Victoria Street, Westminster, London, S.W.1, on or after Feb. 22. Deposit £3 3s. Plans also seen at the Council Offices, Rector Road, Lowestoft from Feb. 22. Tenders by March 21.

Loughborough, Leics.—Approximately 600 lin. yd. of surface water sewers, 450 lin. yd. of foul sewers, together with approximately 3,600 super. yd. of carriageway, a reinforced concrete pumping station and other incidental works, at Derby Road industrial site, for B.C. Documents from John S. Bates, borough engineer and surveyor, Southfields, Loughborough. Deposit £2 2s. Tenders by March 11.

Reading, Berks.—Construction of 190 lin. yd. (approx.) foul sewer and other appurtenant works in private property in Whitley Wood Road, for B.C. Documents from Borough Surveyor, P.O. Box 17, Town Hall, Reading. Deposit £2 2s. cheques payable to Corporation. Tenders by March 1.

Romsey and Stocksbridge, Hants.—Construction of approximately 1,500yd. of 6in. and 9in. dia. spun-concrete sewer, with manholes, ventilating shafts, lateral connections, and other works incidental thereto, in the parish of Nursling and Rownhams, stage I, for R.D.C. Documents from Lemon and Blizard, consulting engineers, Telford House, Hulme Road, Southampton. Deposit £3 3s. (cheques payable to R.D.C.). Tenders by March 21.

Rowley Regis, Staffs.—Regrading of 300 lin. yd. of Mousewater Brook, the construction of approx. 190 lin. yd. of brick/concrete outfall and culvert in Brook Lane, and 700 lin. yd. of 36in. to 54in. dia. stormwater sewer, together with manholes and ancillary works between King Street and Wrights Lane, for B.C. Documents from S. G. Wood, engineer and surveyor, Municipal Buildings, Old Hill. Deposit £2 2s. Tenders by March 2.

Sunbury-on-Thames, Middx.—Littleton Village sewer, for U.D.C., comprising construction of approximately 850yd. of 9in. diameter cast-iron sewer with 6in. branch connections, pumping station, and approximately 100yd. of 6in. diameter cast-iron pumping main. Documents from the Engineer and Surveyor, Council Offices, Green Street, Sunbury-on-Thames. Tenders by March 7.

Uppingham, Rutland.—Construction of the following works, for R.D.C.: (1) Wing sewerage and sewage disposal, the laying of approximately 1,800yd. of 6in. diameter sewers together with the construction of a sewage disposal works; (2) Morcott sewerage and sewage disposal, the laying of approximately 3,500yd. of 6in. diameter sewers together with the construction of a sewage disposal works. Contractors will be given the opportunity of tendering for the individual schemes or of tendering for the two schemes jointly. Documents from Pick, Everard, Keay and Gimson, consulting engineers, 6 Millstone Lane, Leicester. Deposit £5 5s. each scheme, cheques payable to Council. Tenders by March 19.

Upton-upon-Severn, Worcs.—Construction of Castlemorton sewerage and sewage disposal scheme, for R.D.C. Deposit £5 5s. Tenders by March 19.

Uttōxeter, Staffs.—North End outfall sewer, contract I, for U.D.C., comprising construction of approximately 1,000 lin. yd. of 9in. and

6in. diameter spun-iron pipe sewers and 250 lin. yd. of 12in. diameter concrete pipe sewers, together with brick manholes and other incidental works. Documents from Willcox, Raikes, and Marshall, engineers, 33 Great Charles Street, Birmingham, 3. Deposit £5 5s. (cheques payable to U.D.C.). Tenders by March 4.

Wandsworth.—Construction of 23 manholes on existing sewers, for B.C. Documents from the Borough Engineer, Municipal Buildings, Wandsworth, S.W.18. Deposit £2 2s. Tenders by March 9.

Wirral, Cheshire.—Relief sewer, Meadow, Heswall, for U.D.C. Supplying and laying approx. 77 lin. yd. of 15in. dia. glazed stoneware pipes, 75 lin. yd. of 12in. dia. glazed stoneware pipes, 128 lin. yd. of 9in. dia. glazed stoneware pipes, together with ancillary works. Documents from the Engineer and Surveyor, Council Offices, Heswall. Tenders by March 11.

STREET LIGHTING

Dartford, Kent.—Supply and erection of 30 complete lighting units, comprising 15ft. tubular steel columns, 80-watt mercury vapour lamps and lanterns, at Oakfield Lane, for B.C. Documents from Thos. Armstrong, town clerk, Council Offices, Dartford. Deposit £2 2s. Tenders by March 1.

Manchester.—Erection of approximately 93 25ft. concrete columns in Parrs Wood Road (north and south) and 60 20ft. concrete columns in Yew Tree Road, for City Council. Documents from the City Surveyor, Town Hall, Manchester, 2. Tenders by March 1.

Mansfield, Notts.—Erection, wiring and painting of street lighting columns, for B.C. Tenders by March 1.

Redcar, Yorks.—Erection of street lighting units, for B.C. The units consist of e.l.e.c.o. columns and lanterns. Documents from the Borough Engineer, Ridley House, Coatham Road, Redcar. Tenders by Feb. 26.

AWARDS

BUILDING AND DECORATING

(See also Housing Schemes)

Ascot, Berks.—Erection of the new Tattersalls' stand which will replace Alexandra and Grand Tier stands at Ascot Racecourse: George Wimpey and Co., Ltd., Hammersmith Grove, London, W.6. Estimated cost £1m.

Bangor, Caerns.—Erection of public conveniences at the following, for B.C.: Garden of Rest—F. Krubert, £3,787; Garth Point and Menai Suspension Bridge—R. J. Burr, Beach Road, Bangor, £1,760 and £1,755, respectively (recommended).

Barking, Essex.—Plastering for assembly hall, for B.C.: W. A. Telling, Ltd., 62 Raymouth Road, London, S.E.16, £5,658.

Barnsley, Yorks.—Extension of New Lodge residential home, for B.C.: E. Clarkson, Worsbrough Dale, £2,308 (recommended).

Belfast.—Construction of foundations at Waring Street, for the Northern Ireland War Memorial building. Michael Bowley, architect, 22 Lombard Street, Belfast: McLoughlin and Harvey, Ltd., 34 York Road, Belfast.

Birmingham.—Following works, for City Council: A. G. Sheppard Fidler, city architect: Fifty-five lock-up garages, drying areas and landscaping work, Staplehall Farm estate, West Heath contract G18/58—J. H. Bonham and Co. (Redditch), Ltd., 35 Crabs Cross Lane, Hunt End, Redditch, Worcs, £21,595; 115 lock-up garages, Longbridge, Northfield area, contract G18/70—Michael Woods, Ltd., First Acres, Dormston Lane, Inkberrow, Worcs, £20,467; two shops and 14 dwellings, Leach Green estate, Rubery, contract 631—Mackee and Rodway (Contractors), Ltd., 1 Chatham Road, Northfield, Birmingham, 31, £37,714.

Bolton, Lancs.—Terrazzo partitions for provision of cubicles at Bridgeman Street Baths, for B.C.: A. Quiliggotti and Co., Ltd., Manchester (recommended). Estimated cost £1,206.

Bridgend, Glam.—Reinstate and bring to standard terraced houses comprising 47 and 49 Acland Road, for U.D.C. D. J. Amos, engineer and surveyor: O. G. Hartland and Sons, Ltd., 26 High Street, Ogmore Vale, Bridgend.

Bury St. Edmunds, Suffolk.—Alterations and extensions to the Suffolk Hotel, Buttermarket

—E. W. Turner (Builders), Ltd., St. Andrew's Street North, Bury St. Edmunds. Preliminary work commenced.

Cardiff.—Following works, for City Council: Third instalment of Llandaff Technical College extensions—Direct Labour, £177,964; children's public convenience at Victoria Park—Davies and Davies, Ltd., 206 Penarth Road, Cardiff, £2,272; colour-phalting and asphaltating of various proper-

ties—Durastic, Ltd., Harrowby Place, Cardiff (recommended).

Chichester, Sussex.—Re-painting of houses during 1960, for City Council: Direct Labour (recommended).

Consett, Dur.—Alterations and additions to premises in Newmarket Street, for the Consett Co-op. Society, Ltd. Plans by the C.W.S. Architect's Department, 90 Westmorland Road, Newcastle upon Tyne: C.W.S. Architects' Department, 90 Westmorland Road, Newcastle upon Tyne.

Corwall.—Erection of an ambulance depot, comprising garages and control building, at Barn Lane, Bodmin, for C.C. J. R. Hicklin, county architect: Gordon Derry, "Heaverswood," Wadebridge, £13,961. Work to commence March 1.

Crawcrook, Dur.—Erection of workshops, offices and stores for the North-Eastern Electricity Board. L. J. Couves and Partners, architects, Grainger Chambers, Hood Street, Newcastle upon Tyne: Stephen Easton, Ltd., Westgate Road, Newcastle upon Tyne.

Dewsbury, Yorks.—Improvement of lavatories at Birstall C.E. (Aided) School, for West Riding E.C.: P. Ellis and Sons, Warwick Road, Batley Carr, Dewsbury, £6,857 (subject to M.E. approval).

Dewsbury, Yorks.—Following works, for B.C.: Erection of four lock-up shops on the Open Market—Wortley and Boothroyd, Ltd., Ravensthorpe, Dewsbury, £1,662 (recommended).

Alterations to the police garage in Railay Street—Samuel Armitage and Sons, Ltd., Bradford Road, Dewsbury, £3,169 (recommended subject to Home Office approval).

Dewsbury, Yorks.—Provision of toilet accommodation at Ravensthorpe C.E. kitchen dining room, for B.C.: William Airey and Son (Leeds), Ltd., Eldon House, Leeds, 2, £835 (recommended, subject to M.E. approval).

Doncaster, Yorks.—Erection of three-storey shopping precinct on frontage of St. Sepulchre Gate and Frenchgate, for the Arndale Property Trust, Ltd. Shimpler and Risdon, architects, 47 Bedford Row, W.C.1; F. R. Bullen and Partners, consulting engineers, Dacre House, Dean Farrar Street, London, S.W.1; R. C. McCaffrey, quantity surveyor, 32-34 Piccadilly, Bradford, 1; Leslie and Co., Ltd., 20 Woodland Road, Darlington.

Dover, Kent.—Erection of garages at Russell Street/St. James's Street (first stage), and a new bus shelter and public convenience at Old Folkestone Road, for B.C. R. J. Barwick and Sons, Ltd., Market Street, Dover, £3,242 and Hedgecock Bros., £2,236, respectively.

Reconstruction of buildings at the Methodist Church, London Road: G. Lewis and Sons (Dover), Ltd., 14 Widred Road, Dover, £46,000. Work has commenced.

Droxford, Hants.—Erection of a block of nine garages, Bere Road, Denmead, and a block of six garages, Headon View, West Meon, for R.D.C.: F. Lindley, engineer and surveyor: A. G. Wakeford, Denmead, £948, and R. G. Hughes, Catisfield, Fareham, £734, respectively. Work just commenced.

Durham.—Following works, for C.C.: Erection of branch library at Ryton—R. C. Williamson (Durham), Ltd., Station Works, Rowlands Gill, Co. Durham, £8,605.

Construction of covered yard and milking parlour at Houghall School of Agriculture: T. W. Gildroy and Son, Sherburn Road, Durham, £5,500.

East Ham, Essex.—Erection of new municipal college at High Street South, for E.C.: Wilson Lovatt and Son, Ltd., 16 Grosvenor Crescent, London, S.W.1, £715,115. Work has commenced.

Edinburgh.—Erection of new head office building at St. Andrew Square, for Scottish Widows' Fund and Life Assurance Society. Basil Spence and Partners, architects, 40 Moray Place, Edinburgh: Holloways Scottish Constructions, Ltd., Mem House, 91 George Street, Edinburgh, 2.

Gateshead, Dur.—New premises at Windermere Crescent, for Gateshead Talmudical College, 179 Bewick Road, Arthur and Kirkup, architects, 13 Swinburne Street: John Jackson and Sons, Corporation Street, Newcastle upon Tyne.

Erection of New Heathfield Grammar School, for B.C. Plans by G. F. Winters, borough engineer: General contractors—Middleton and Co., Queen Alexandra Bridge Approach, Sunderland; electrical work—Campbell and Isherwood, Ltd., Silver Street, Newcastle upon Tyne. Total cost about £200,000.

Guisborough, Yorks.—Erection of a new parish hall. R. Cowan, architect, 20 Finkle Street, Stockton-on-Tees: H. Peacock (Guisborough), Ltd., 131 Westgate, Guisborough. Work commenced.

Hampstead.—Conversion works to properties, as follows, for B.C.: 4 Kingdom Road, 65 Aberdare Gardens, and 26 Lymington Road—Smith and Mills, Ltd., 5 Elmdale Road, London, N.13, £2,399, £3,253 and £4,018, respectively; 16 Denning Road and 6 Lambolle Road—Herbert Kennard, Ltd., 9-11 Streatham High Road, London, S.W.16, £2,930 and £2,798, respectively; repairs and redecorations at 29 Howitt Road and 26 Compayne Gardens—L. F. Davis (Builders), Ltd., 83a Geffrye Street, London, E.2, £848 and £2,431, respectively; repairs and redecorations at 6 The Croft, Primrose Gardens—Pritchett Bros., Ltd., 1a Redvers Street, London, N.1, £853.

Conversion works at 21 Bracknell Gardens, for B.C.: L. F. Davis (Builders), Ltd., 83a Geffrye Street, London, E.2, £2,417 (negotiated tender).

Internal repairs and redecorations at 179 Belsize Road, for B.C.: John Scullard, Ltd., 80 Mansfield Road, London, N.W.3, £298 (recommended).

Hendon, Middx.—Erection of a petrol filling station at south corner of Stuart Avenue and The Hyde, for Shell-Mex and B.P., Ltd., Shell-Mex House, Strand, London. Sir Robert Tasker and Partners, architects, 3 Field Court, Gray's Inn, London, W.C.2; Alexander Cook and Partners, quantity surveyors, 5 Staple Inn, W.C.1; S. Varney and Co., Ltd., Credon House, Verney Road, London, S.E.16.

Liverpool.—Erection of building on the corner of Water Street and Drury Lane, for the Commercial Union Assurance Co. Daniel Watney, Eiloart, Inman and Nunn, architects, The Charterhouse, Charterhouse Square, London, E.C.1; G. D. Walford and Partners, quantity surveyors, 7-9 St. James's Street, S.W.1; R. Travers Morgan and Partners, 60 Aldermanbury, London, E.C.2, and K. W. Dale and Partners, 9a Sackville Street, London, W.1, are the consultants; H. Fairweather and Co., Ltd., Hyde Works, St. James's Lane, London, N.10. Estimated cost £200,000-£300,000.

Manchester.—Rebuilding store at Market Street, for Henry's Stores, Ltd. Marsden Massey and Arschavir, architects, 14 St. Peters Square; R. V. Jenkins and Co., quantity surveyors, 737 Warwick Road, Solihull, Warwickshire: Bovis, Ltd., 1 Stanhope Gate, London, W.1. Estimated cost £400,000. Demolition commenced.

Middlesbrough, Yorks.—New premises in Cannon Street for the Western Social Club and additions to the Ayresome Quoit and Air Rifle Club, North Road. E. Gordon Crofts, architect, 49 Grange Road, Darlington; Marsh (Builders), Ltd., Grangefield Road, Stockton-on-Tees.

Newport, Mon.—Adaptation and alterations at 88 and 90 Stow Hill, for B.C.: G. Prosser and Co. (1938), Ltd., West Market Street, Newport, £3,100 (recommended).

North Riding.—Erection of first part of modern school at Saltburn, for C.C. Grenfell Baines and Hargreaves, architects, 12-24 Guildhall Street, Preston, Lancs. A. E. Towler, quantity surveyor, 117 Fishergate, Preston; James Miller and Partners, Wakefield, Yorks., £10,149.

North Shields.—Erection of grocery supermarket in Saville Street on the site of the Comedy Theatre for the Arndale Property Trust, Ltd. G. M. Baxter, staff architect; Leslie and Co., 80 Woodland Road, Darlington.

Northumbrian.—Completion of civil defence training centre at Southgate, for C.C. C. C. Brown, county architect; R. Hush, Union Street, Blyth, £58,568.

Oban, Argyll.—Alterations and extensions to pavilion 1, County Sanatorium, for Board of Management for Oban and District Hospitals. Weddell and Thomson, architects, 3 Lynedoch Street, Charing Cross, Glasgow, C.3: Excavator, brick, etc., works: John MacLachlan, Ltd., Lochside Street, Oban; carpenter and joiner—D. and J. MacDougall, Drimvargie Road, Oban; slater and roughcast—James Gray and Sons, 94-96 Academy Street, Inverness; plumber—J. M. Boyd, 18 Airds Crescent, Oban; plaster—D. and J. MacDougall, Drimvargie Road, Oban; painter—Thomas C. Watson, Ltd., 254 Kilmarnock Road, Glasgow, S.3.

Peterborough.—Construction of stage one, phase one, of the development of the Memorial Hospital, comprising homes for nurses, teaching department, recreation hall, boiler house and plant to serve the whole development and external works, for the East Anglian Regional Hospital Board: George Wimpey and Co., Ltd., Hammersmith Grove, London, W.6, £292,799 (recommended, subject to Ministry approval).

Poplar.—Repair of properties at Bow Road, Atley Road, Driffield Road, Libra Road, Malmesbury Road, Merchant Street, Norman Grove, Tredegar Road, Vernon Road and

Wellington Way, for B.C.: S. Luxton and Son, Ltd., 5 Stewart Street, London, E.14, £7,565 (recommended).

Port Erin, I. of M.—Erection of public conveniences at Shore Road, for the Commissioners: J. S. Keggin, Port St. Mary, £3,923.

Portsmouth.—Following works, for City Council: Construction of a home for 60 aged persons and 18 aged persons' bungalows at St. Mary's Road—H. E. Collins, Ltd., Eastern Road, Farlington, Portsmouth, £78,595 (recommended); Howe and Bishop, Ltd., £78,880; J. V. Figgins (Builders), Ltd., £78,882; Portsmouth, Gosport and District Builders' Guild, Ltd., £80,628; A. G. Figgins (Contracts), Ltd., £81,047; H. Jones and Son (Portsmouth), Ltd., £83,000; E. and A. Springs, Ltd., £85,576.

Internal redecoration of Rock Garden pavilion—Direct Labour, £514 (recommended); Johns and Harris, £573; Thomas Stride and Son, £626; John Lay and Co., Ltd., £647; Frank J. Privett, Ltd., £727; Jno. Croad, Ltd., £732; Henry Jones and Son (Portsmouth), Ltd., £827; E. and A. Springs, Ltd., £889.

Minor alterations and construction of a playground at Twyford Avenue Day Nursery—R. W. Bailey, 399 Copnor Road, Portsmouth, £1,396 (recommended); Upton and Winder, Ltd., £1,449; A. E. Porter and Son, Ltd., £1,529; Henry Jones and Son (Portsmouth), Ltd., £1,900; Jno. Croad, Ltd., £1,980.

Erection of new arts and crafts music block and dining hall and refectory conversion at the Portsmouth Training College—John Hunt, Ltd., Cleveland Road, Portsmouth, £48,925 (recommended); Jno. Croad, Ltd., £49,208; Frank J. Privett, Ltd., £49,649; Samuel Salter (Portsmouth), Ltd., £50,962; Portsmouth, Gosport and District Builders' Guild, Ltd., £53,125; Hawkins Bros. (Gosport), Ltd., £54,930; Joseph Cartwright, Ltd., £57,583; M. J. Gleeson (Contractors), Ltd., £58,725; A. G. Figgins (Contracts), Ltd., £62,203.

Provision of sanitary offices at Portsea Modern School for Boys—John Lay and Co. (Portsmouth), Ltd., 207 Arundel Street, Portsmouth, £1,073 (recommended); Henry Jones and Son (Portsmouth), Ltd., £1,174; Jno. Croad, Ltd., £1,204.

Erection of public conveniences at Twyford Avenue—Johns and Harris, Briarwood Mill Road, Fareham, £1,756 (recommended); A. E. Porter and Son, Ltd., £1,879; H. Jones and Son (Portsmouth), Ltd., £2,960.

Construction of public convenience, Lower Drayton Lane/Havant Road—J. H. Day (Farlington), Ltd., 9 Woodfield Avenue, Farlington, Portsmouth, £2,420 (recommended, negotiated tender).

Preston, Lancs.—Extension of the Harris College of Further Education, for the Ministry of Education Development Group. A. J. and J. D. Harris, consulting engineers, 75 Victoria Street, London, S.W.1; Holland & Hannen and Cubitts (North West), Ltd., New Chester Road, Bromborough, Cheshire, £650,000.

Reading, Berks.—Demolition of premises at Friar Street and the erection of a block of shops and offices on the site, for the Bernard Sunley Organisation. E. Norman Bailey and Partners, architects, 25 Catherine Place, London, S.W.1; Bernard Sunley and Sons, 25 Berkeley Square, London, W.1. Demolition work just commenced.

Erection of a bakery on site at rear of the Western Manufacturing Company's premises at Woodley, for Chibnalls, Ltd., Lowton Construction Co., Ltd., Warrington, Lancs. Work to commence shortly.

Rochford, Essex.—Construction of six garages at Nansen Avenue, Ashingdon, for R.D.C. J. F. E. Nott, engineer and surveyor: The Rochford and District Building Co., Ltd., 381 Main Road, Ashingdon, £1,197 (accepted); F. W. Bevan and Sons, Ltd., £1,321; J. F. Hartgrove, £1,446; Higgs and Bone, Ltd., £2,700. Work commencing shortly.

St. Helens, Lancs.—Erection of aged persons' hostel, Derbyshire Hill neighbourhood centre, for B.C. M. Ward, borough engineer: Direct Labour.

Salisbury, Wilts.—Extensions to St. Thomas Secondary Modern School at Westwood estate, for Co. E.C.: James and Crockerell, Ltd., Durrington, Salisbury, £11,470.

Sheffield.—Rebuilding of Black Swan Hotel, Snig Hill, for Samuel Smiths Old Brewery (Tadcaster), Ltd., Hadfield. Cawkwell and Davidson, architects, 17 Broomgrove Road: John Eshelby and Son, Spring Street, Sheffield, 3. Estimated cost £135,500.

Erection of the new Oxspring Mission Church, Penistone, for Parochial Church Council of St. John the Baptist Church. A. H. and B. D. Greenhalgh, architects, 57

Market Place, Malton, Yorks.: E. Cutts, Ltd., Langdale Road, Barnsley, £6,448. **Southport, Lancs.**—Following, for B.C.: Conversion of former concert hall at Botanic Gardens for use as a cafe—Direct Labour. Estimated cost £840.

Erection of a home for the aged at Sandbrook Road, Ainsdale—Sir Robert Lloyd and Co., Ltd., Port Causeway, Bromborough, Cheshire, £82,341; supply and driving reinforced concrete piles to form a foundation for the home—West's Piling and Construction Co., Ltd., West Drayton, Middx., £5,151 (both recommended, subject to Ministry approval).

South Shields, Dur.—Structural steelwork for extensions to Cleadon Park County Secondary School, for E.C.: J. W. Ellis and Co., Ltd., Great North Road, Newcastle upon Tyne, £3,954.

Staines, Middx.—Extensions to Manor Works, for W. E. Sykes, Ltd., Scott Brownrigg and Turner, architects, 32 London Road, Guildford: W. S. Try, Ltd., Cowley, Uxbridge. Estimated cost £9,752.

Stretford, Lancs.—Erection of four garages on All Saints site, for B.C.: Smith and Allcock, Ltd., 471 Chester Road, Manchester, 16, £697 (recommended, subject to Ministry approval).

Stoke Newington.—Repairs and adaptations to various properties, as follows, for B.C.: Seven properties—Direct Labour, £10,235; 10 Truman Road—Prater, Ltd., 34 Green Lanes, London, N.16, £1,085; 9 Manor Road—M. and E. Builders, Ltd., 44 Cowper Road, London, N.16, £1,299; 44 Lordship Park—R. Talbot and Sons (London), Ltd., 356 Caledonian Road, N.1, £947 (all recommended).

Sunderland, Dur.—Rebuilding showrooms in Olive Street, for F. Clarke, Ltd.: R. Matthews and Co., 47 Nile Street, Sunderland.

Erection of shops and offices on the site of the King's Theatre, Crowtree Road, Gillinson and Barnett, architects, 8 Queens Square, Leeds: Cussins (Contractors), Ltd., The Drive, Gosforth, Newcastle upon Tyne.

Erection of factory and offices, Henry Street East, for E. Cottam: Sloan and Earshaw, 60 Dundas Street, Sunderland.

Erection of a Methodist Church at Ettrick Grove, Matkin and Hawkins, architects, Barclays Bank Chambers, Fawcett Street, Sunderland (successors to J. Potts and Sons): D. and J. Ranken, Ltd., Stockton Road, Sunderland. Work commenced.

Swinton and Pendlebury, Lancs.—Erection of homes for the aged at Moorfield, for B.C.: G. and J. Seddon, Ltd., Little Hulton, £41,434 (recommended).

Tyrone.—Erection of a new primary school at Carnall, for Co. E.C.: W. J. Crooks, Union Street, Cookstown. Estimated cost £14,285.

Walsall, Staffs.—Construction of an office and warehouse at Bridgeman Street, for Benjamin Perry (Walsall), Ltd., Hickton Madeley and Salt, architects, Hatherton Road, Walsall, and Henry Vale and Sons, quantity surveyors, 47 Waterloo Road, Wolverhampton: L. Dainty, Ltd., Leighwood Grove, Aldridge, Staffs. Work commenced.

Walthamstow, Essex.—Following works, for B.C.: Erection of a sports pavilion at Lloyd Park—J. Morgan and Son (Stepney), Ltd., 146 Whitehorse Road, London, E.1, £11,240 (recommended).

Repair and improvement of (a) 22, 24 and 28 Fairfield Road, and (b) 90 Acacia Road—Direct Labour (recommended). Estimated cost (a) £737 per dwelling, and (b) £687 respectively.

Wandsworth.—Painting steel lamp columns, for B.C.: Bagshaw Contractors, Ltd., £1,608 (recommended); J. H. Miskelly, £1,917; Gallagher and O'Brien Enterprises, Ltd., £2,425; W. F. G. Gray, Ltd., £2,750.

Watford, Herts.—Thirty-one garages, with access roads, at Waterman Close, for B.C.: Bell and Webster, Ltd., Essex Road, Hoddesdon, Herts., £4,809 (recommended).

West Hartlepool, Dur.—Erection of new Brierton Hill Secondary Technical School for Girls, for E.C.: A. G. Sinclair, borough architect: J. Miller and Partners, Wakefield, Yorks., £161,500.

Westminster.—Conversion and repair works for adaptation of basements at 21-23 St. George's Square, for City Council: Jupiter Construction Co., Ltd., 1 Storey's Gate, London, S.W.1, £3,836 (recommended).

Worksop, Notts.—Builders' work at Victoria Hospital, for Sheffield Regional Hospital Board: Hewitt and Maughan, 11 Wingfield Avenue, Worksop, £605 (recommended).

CLOTHING AND TEXTILES

Southport, Lancs.—Supply of uniform clothing for various departments, for B.C.: K. Marock and Co., Ltd., 15 Arcola Street, London, E.8—uniform suits and overcoats, £1,043 raincoats, £245; caps, £18 (recommended).

DEMOLITION

New Romney, Kent.—Demolition of the old fire station and clearance of the site, for B.C.: S. A. K. Masey, 28 Marsh Crescent, New Romney, £42.

Paddington.—Demolition of 5-22 Crompton Street, for B.C.: Henry Boyer and Sons, Ltd., Terminus Wharf, London, W.2, £984.

Poplar.—Demolition and clearance of four surface shelters at 24 Birchfield Street, and 1-5 St. Leonard's Street, for B.C.: Frank Valori, Ltd., 34 Christchurch Road, London, S.W.2, £39 (recommended).

ELECTRICAL

Cardiff.—Installation of a passenger lift at Llanrumney and Gabalfa Homes for Aged Persons, for City Council: Electro-Lifts, Ltd., £1,390 each (recommended).

Darlington, Dur.—Following, for B.C.: Improving the electric lighting at the College of Further Education—James Paterson and Co., Darlington, £472; similar work at Eastbourne Secondary Schools—Cox-Walkers, Ltd., Darlington, £762.

Peterborough.—Electrical services for stage one, phase one, of the development of the Memorial Hospital, for the East Anglian Regional Hospital Board: B. French, Ltd., Kidderminster, £17,138 (recommended, subject to Ministry approval).

Seaham, Dur.—Rewiring of 265 houses on the Deneside estate, for U.D.C.: John Calvert (Electrical), Ltd., 60 Church Street, Seaham.

Walthamstow, Essex.—Electrical installations at West Street and St. Stephen's Road housing estates, for B.C.: Worboys Electrical Co., Ltd., Eastern Works, Alfred's Way, Barking, £3,811 (recommended).

FENCING

Portsmouth.—Provision of galvanised steel-work fencing at East Lodge play space, for City Council: Matchless Fencing, Ltd., £417 (recommended); G. A. Day, Ltd., £419; Flextella Fencing and Engineering, Ltd., £428; Peerless Fence and Products, Ltd., £422; Boulton and Paul, Ltd., £446; Pendold Fencing, Ltd., £457; P. M. Broom (Contractors), £448; Durafencing, Ltd., £474; Gerald Gilmer, Ltd., £537.

GAS AND WATER SUPPLY

Annan, Dumfries.—Modifications to works at Landheads, for B.C.: Kyle and Frew, consulting engineers, 9 Clairmont Gardens, Glasgow, C.3: Jas. Crombie and Son (Annan), Ltd., Carrutherstown, £11,685 (accepted); Border Engineering Contractors, Ltd., £13,507; Baird Bros. (Port Glasgow), Ltd., £13,658; Eden Construction Co., Ltd., £15,098; Crowley Russell and Co., Ltd., £17,491.

Barnsley, Yorks.—Provision of six boreholes for development of water resources, for B.C.: John Thom, Ltd., Chaddock Lane, Boothstown, Walkden, Lancs., £40,560 (recommended).

Carlisle, Cumb.—Special equipment for construction of the High Brownelson reservoir, for City Council: Float-operated inlet valves—Glenfield and Kennedy, Ltd., 105 Park Street, London, W.1, £488; lifting gear—Herbert Morris, Ltd., P.O. Box 7, Loughborough, Leics., £65; water level transmission—Lea Recorder Co., Ltd., Parliament Mansions, Abbey Orchard Street, S.W.1, £596 (all recommended).

Dewsbury, Yorks.—Supply of following, for the Mitchell Laithes sewage disposal works, for B.C.: Screening apparatus—Ames Crosta Mills and Co., Ltd., Heywood, £1,050; recording apparatus—Lea Recorder Co., Ltd., 10 Cornbrook Park Road, Manchester, 15, £500 (both recommended).

Dewsbury, Yorks.—Internal plumbing and gas installation at new secondary technical school, for B.C.: Grocock and Day, Ltd., 26 Mayfield Road, Leicester, £7,382 (recommended).

Dunfermline, Fife.—Main laying from Glassie-barns to Langfaulds, for City Council: Andrew Sinclair, burgh engineer: George Bald, 26 Queen Anne Street, Dunfermline, £6,447 (accepted); James Ritchie and Son, £7,795; Pipe Tracks, Ltd., £8,303; Wilson, Kinmond and Marr, Ltd., £9,105; Jacksons (Edinburgh), Ltd., £9,916; Whartlings, Ltd., £9,993; Alex. H. Miller, £10,208; James Keenan and Co., Ltd., £10,642; John Wight and Co. (Edin.), Ltd., £11,169; Chas. Gray (Builders), Ltd., £11,296; Alex. Robertson and Co., Ltd., £13,856; F. J. C. Lilley (Contractors), Ltd., £14,508; Wm. Dale and Son, Ltd., £14,764. Work to commence in March.

Knighton, Radnor.—Second stage of the Bledfa and Lugg Valley water supply scheme, for R.D.C.: Charles R. Coxill, Ltd., Lilleshall, Newport, Salop, £43,239.

Maldon, Essex.—Excavation and laying only of 300 lin. yd. 3in. a.c. mains and fittings at Tillingham, 250 lin. yd. 3in. a.c. mains and fittings at Goldhanger, and 700 lin. yd. 3in. and 4in. a.c. mains and fittings at Northend housing site, Southminster, for R.D.C. I. M. Nicholson, engineer and surveyor: G. J. Bardwell, Montrose, Cold Norton, Chelmsford, £2,299 (accepted); J. Nunn and Sons, £2,692; S. R. Jones and Co., Ltd., £2,747; J. W. Izard, Ltd., £2,994; S. D. Shaw and Sons, Ltd., £3,220; Connor Master Builders, £3,333. Work commencing March.

HARBOURS, PIERS AND SEA DEFENCE WORKS

Ross and Cromarty.—Construction of a ferry slipway on route A.87 in Kyle of Lochalsh,

including the formation of a vehicle assembly area and car park, for C.C.: Crowley Russell, Ltd., Blytheswood Square, Glasgow.

HEATING AND VENTILATING

Cardiff.—Installation of heating and alterations to hot water services at Fairwater House, for City Council: Heating (Cardiff), Ltd., £2,650 (recommended).

Hampstead.—Boiler conversion work at Templar House, for B.C.: Chas. P. Kinnell and Co., Ltd., 65 Southwark Street, London, S.E.1, £2,585 (recommended).

Northwich, Cheshire.—Following, for R.D.C.: (1) Oil-fired central heating system to a mess hut at Whitehall, Hartford; (2) oil-fired air heater to garages at Whitehall, Hartford. J. B. Birtwistle, engineer and surveyor: (1) Messrs. Bernard and Partners, 20 Canning Place (bottom of South Castle Street) Liverpool, 1, and (2) J. Renshaw, 13/15 Stockport Road, Denton, Manchester.

Peterborough.—Mechanical engineering services for stage one, phase one, of the development of the Memorial Hospital, for the East Anglian Regional Hospital Board: G. N. Haden and Sons, Ltd., Lincoln, £49,947 (recommended, subject to Ministry approval).

St. Pancras.—Conversion to oil-fired water heating system at Una House, for B.C.: Hope's Engineering and Heating, Ltd., 17 Berners Street, London, W.1, £1,102 (recommended).

Shoreham-by-Sea, Sussex.—Plumbing works in 18 houses situated at Gordon Road, comprising the installation of hot and cold water systems and other ancillary plumbing works, for U.D.C.: F. E. Chatterley, 84 Fairway Crescent, Portslade, £1,303 (accepted); Southwick Construction Co., Ltd., £1,326; M. G. Jeffrey, Ltd., £1,329; Green, Norn and Porter, £1,870; E. P. Fowler, £1,901; U. D. Bell, £2,989. Work to commence in two weeks.

Southport, Lancs.—Provision and installation of a calorifier and hot and cold water services at the abattoir, for B.C.: J. A. Brooks (Southport), Ltd., Southport, £1,057 (recommended).

HOUSING SCHEMES

Antrim.—Erection of three caretakers' cottages and ancillary work at Killyane Dam, near Ballyclare, for Mid-Antrim Waterworks Joint Board: Ferguson and S. McIlveen, architects, 15 College Gardens, Belfast: Mairs Bros., 12 The Square, Ballyclare.

Barking, Essex.—Thirty dwellings at Howard and Morley Roads, for B.C.: Hawker-Smith,

Believe it or not!

The Cleveland 140 Wheel Trencher, illustrated, was timed cutting a trench 4ft. deep and 21in. wide through gravelly clay subsoil on a 22-mile high-pressure gas main laying contract in the Eastern Counties **AT THE RATE OF NEARLY 20FT. PER MINUTE.**

Speed of digging, the outstanding characteristic of Cleveland Trenchers, gives higher output at lower cost even under the most severe conditions.

The Model 140 will cut trenches from 17½in. to 30in. wide to a maximum depth of 5ft. 6in., and has a range of digging speeds from .5ft. to 37.3ft. per minute. 16in. crawler tracks give a ground pressure of only 5.7lb. per sq. in.

Full details from U.K. Manufacturers and Distributors.

JOHN ALLEN & SONS (OXFORD) LTD • COWLEY • OXFORD • Tel. Oxford 77155-6-7



Ltd., 130 Penhill Road, Bexley, Kent, £55,074 (subject to Ministry approval).

Birmingham. — Following works, for City Council. A. G. Sheppard Fidler, city architect: Twelve dwellings, Short Heath Road, Erdington, contract 692, and 41 dwellings and 18 garages, The Firs estate, contract 613—Geo. Stubbins, Ltd., 201 Streetly Road, Erdington, Birmingham, 23, £24,389 and £89,484, respectively; 67 dwellings and seven garages, Shenley Lane, Northfield, contract 674—Gilligan Bros., Ltd., 765 Shirley Road, Hall Green, Birmingham, 28, £100,653; 14 bungalows, Friary Road, Handsworth Wood, contract 686—A. W. Houghton and Co., Ltd., 2a Charles Edward Road, Yardley, Birmingham, 26, £23,150; 68 dwellings, one shop and 50 garages, Eachway Farm estate, Rubery, contract 696—Mackee and Rodway (Contractors), Ltd., 1 Chatham Road, Northfield, Birmingham, 31, £149,470.

Blaydon, Dur. — Thirty single-storey aged persons' bungalows on the Smale's Farm estate, Rowlands Gill, for U.D.C.: Direct Labour.

Canvey Island, Essex. — One hundred and ninety dwellings, four shops and 47 garages (second stage of development), for U.D.C.: F. P. Smith (Thurrock), Ltd., 4 Chestnut Avenue, Grays, Essex, £260,870 (recommended).

Cardiff. — Twenty-three dwellings, group two, at Manorbier Crescent, for City Council: Bond Bros., £46,621 (recommended, in lieu of previous tender).

Chatham, Kent. — Following works, for B.C.: Twenty-one old people's dwellings at Thorne-dike House site, Palmerston Road—Bennett and Smith (Builders), Ltd., Sheerness, £32,416; reinforced concrete framework for block A (seven-storey) and block B (five-storey flats) in the Hardstow area—Truscon, Ltd., 35 Lower Marsh, London, S.E.1, £38,285.

Chelmsford, Essex. — (a) Fifty-seven houses and three garages, and (b) 18 bungalows at Meadgate, for B.C.: G. Tanner and P. O. Wicks, Ltd., High Garrett Office, Braintree, £93,902; and F. Hodgson and Son, Ltd., 34 Orchard Street, Chelmsford, £93,902 and £19,376, respectively.

Chesterfield, Derbyshire. — Eight Homeville traditional flats at White House housing site, Tupton, for R.D.C.: Lowe Bros., 193 Langer Lane, Chesterfield.

Cockermouth, Cumb. — Erection of a block of houses, for U.D.C.: Thomas Armstrong, Ltd., South Street, Cockermouth, £7,033.

Dewsbury, Yorks. — Forty-six dwellings and construction of roads and sewers on the Batley Carr redevelopment area, for B.C.:

Harlow and Milner, Ltd., Warrengate, Wakefield, £85,247 (recommended, subject to Ministry approval).

East Retford, Notts. — Following works, for R.D.C. A. C. Bishop, architect, Yorkshire Penny Bank Chambers, Market Square, Retford: 71 houses at Lincoln Road, Tuxford—Dernie and Bell, Sons and Co., Ltd., Kilton Crescent, Worksop, £94,583 (accepted); J. H. and W. E. Ilett, Ltd., £96,863; J. Brown and Son (Retford), Ltd., £100,815; H. Dorrington and Sons, Ltd., £105,186.

Seven houses and four bungalows at North Wheatley—B. and K. Stockdale (Builders), Ltd., East Markham, near Newark, £14,643.

Fort William, Inverness. — Three tenement blocks with attached cottages (46 houses in all) at Claggan prefab. site development I—trades, for B.C. John A. W. Grant, architect, 36 Melville Street, Edinburgh: Mason-John Best (Contractors), Ltd., Warriston House, Warriston Road, Edinburgh, £37,810; joiner—J. MacLellan, Bank Street, Fort William, £19,495 glazier—Highland Glazing Co., Ltd., 32a Waterloo Place, Inverness, £301; plumber—R. Campbell and Sons, Fort William, £6,994; plasterer—A. Grant and Sons, Burnett Road, Longman estate Inverness, £8,147; slater and roughcast—W. Taylor and Sons, 17 Baron Taylor's Street, Inverness, £4,579; electrician—James Scott and Co. (Electrical Engineers), Ltd., 6-12 Princes Street, Edinburgh, £3,931.

Leatherhead, Surrey. — Resurfacing footways and re-kerbing works, for U.D.C.: W. H. Gaze and Sons, Ltd., 139 Roehampton Vale, S.W.15, £4,576.

Marple, Ches. — Twenty-seven Homeville traditional housing units at Hibbert Lane and Oldham Road, for U.D.C.: Wm. Martin, Ltd., Dowson Road, Hyde.

Middlesbrough, Yorks. — Thirty-five houses at Pallister Park, for B.C. J. A. Kenyon, borough engineer: C. W. Athey and Sons, Ltd., Windsor Road, Middlesbrough, £55,000.

Moira, Down. — Following, for R.D.C. J. A. Blakely, architect, 38 Market Street, Lurgan: Sixty-six houses at Moira—Jas. McMullan and Co., Ltd., Knockmore, Lisburn, £96,766 (recommended); Calvert Bros., £97,393; Gilchrist and Cunningham, £104,860.

Ten houses at Correeny—Calvert Bros., Ltd., Bleary, Portadown, £15,520 (recommended); Jas. McMullan and Co., Ltd., £16,534; Millar and Co., £16,803; Gilchrist and Cunningham, £17,003.

Newark-on-Trent, Notts. — Forty flats and maisonettes and 20 garages at Northgate, for B.C.: G. Wimpey and Co., Ltd., Beechdale Road, Aspley, Notts., £61,280.

Newbury, Berks. — Four houses and six bungalows at Wickham, for R.D.C.: Cooke Brothers, Ltd., 2 Park Way, Newbury, £15,155. Work commenced.

Newcastle-under-Lyme, Staffs. — Twenty-eight old people's bungalows at Park Road, Silverdale, for B.C.: Joseph Jones, Ltd., Liverpool Road, Newcastle-under-Lyme, £34,307 (recommended).

Newport, Mon. — One hundred and forty dwellings at Ringland, for B.C.: George Wimpey and Co., Ltd., Newport Road, Cardiff, £210,067 (recommended).

Norton-Radstock, Som. — Eight flats and eight bungalows at Westfield housing estate, Radstock, for U.D.C. Redwood, Miles and Wills, architects, 18 Great George Street, Bristol, 1; S. W. Foster, Ltd., Coombend, Radstock, Bath, £17,363 (accepted); Plummer and Hockey, £17,759; H. C. Bissix, £19,129.

Oundle and Thrapston, Northants. — Twenty-six dwellings, seven garages and a children's playground at Nassington, for R.D.C.: H. J. Firman, Ltd., Newark Road, Peterborough, £40,571.

Penryn, Corn. — Thirty-five Homeville traditional housing units at Pernmarin Road, for B.C.: Gray Conoley and Co., Ltd., Islington Wharf, Penryn.

Portsmouth. — Thirty-six flats and 24 garages at Furze Lane, for City Council: J. V. Figgins (Builders), Ltd., £67,227; H. E. Collins (Builders), Ltd., £67,976; Portsmouth, Gosport and District Builders' Guild, Ltd., £68,335; Howe and Bishop, Ltd., £69,130; Henry Jones and Son (Portsmouth), Ltd., £70,424; A. G. Figgins (Contracts), Ltd., £71,212; William Willett, Ltd., £71,330; John Hunt, Ltd., £71,852.

St. Pancras. — Following, for B.C.: 61 dwellings at Castle Road—M. J. Gleeson (Contractors), Ltd., London Road, Cheam, Surrey, £136,966; 164 dwellings at Gospel Oak redevelopment (area II), Lamble Street extension—M. J. Gleeson (Contractors), Ltd., £459,204 (both recommended).

Shoreham-by-Sea, Sussex. — Conversion of 22 Corbyn Crescent into two self-contained flats, for U.D.C.: F. Challen, 31 Rosslyn Avenue, Shoreham-by-Sea, £1,084 (accepted, subject to Ministry approval); R. D. V. Taylor, £1,165; D. E. F. Pilbeam, Ltd., £1,184.

South Molton, Devon. — Ten bungalows and site works at Kingsway, for B.C.: Priest Bros., West Street, South Molton, £13,512 (recommended).

Swaffham, Norfolk. — Twenty-two Homeville traditional bungalows at Coronation Grove.

3 PIPE LINES ARE NEEDED on Winfrith Heath

AND THEY ARE
ALL

SHARP JONES

The complicated drainage and disposal system at the new Atomic Energy Establishment at Winfrith calls for parallel pipe lines of different types and dimensions. The pipes for all three lines have been supplied by Sharp Jones—makers of good pipes for over 105 years.

SHARP JONES
& CO., LTD.

**BOURNE VALLEY WORKS, PARKSTONE
POOLE, DORSET**

Telephone:

Westbourne 61226-7-8

On the left: 15" dia. Rock-
Concrete Pipes for Stormwater.

Centre line: 12" dia. British
Standard Tested Salt-glazed
stoneware pipes for process
drain.

On the right: 6" dia. British
Standard Salt-glazed Stone-
ware pipes for soil sewer.

By kind permission of The
United Kingdom Atomic Energy
Authority, Winfrith, Dorset.

Main Contractors:
TURRIFF CONSTRUCTION
CORPORATION LTD.

for U.D.C.: O. Staines and Son, Station Road, Swaffham.

Swanscombe, Kent.—Sixteen Homeville traditional housing units at Manor Farm estate, for U.D.C.: D. Jones, White Hart Road, Orpington.

Swinton and Pendlebury, Lancs.—Following, for B.C.: Eighty-four dwellings on the Clifton estate—Direct Labour, £121,152 (recommended).

Sixty-six houses on the Beehive estate: G. and J. Seddon, Ltd., Little Hulton, (extension of contracts recommended, subject to Ministry approval).

Walthamstow, Essex.—(a) Provision of asphalt paving and flooring at Prospect Hill estate, and (b) structural floors, etc., at West Street and St. Stephens Road estates, for B.C.: (a) Filkingtons Asphalt Co., Ltd., Norway Place, Commercial Road, London, E.14, £1,072, and (b) The Kleine Co., Ltd., 9 George Street, London, W.1, £10,628 (recommended).

Wandsworth.—Following, for B.C.: 24 dwellings in four three-storey blocks at phase III of Portinscale estate, Putney—M. Howard (Mitcham), Ltd., Wandle House, London Road, Mitcham, Surrey, £51,125 (fixed price tenders, recommended); Joseph Cartwright, Ltd., £52,374; Walker (Tooting), Ltd., £52,450; The Anglo-Scottish Construction Co., Ltd., £53,059; Thomas and Edge, Ltd., £53,135; Robert Hart and Sons, Ltd., £53,340; Perrys (Ealing), Ltd., £53,373; T. Ringham and Co., Ltd., £54,150; T. R. Roberts (Builders), Ltd., £54,393; E. S. Moss, Ltd., £54,651; M. J. Gleeson (Contractors), Ltd., £54,895. Thirty-six flats in a two-storey and a three-storey block on phase II of Princes Way site, Southfields—Token Construction Co., Ltd., 68 Mount Street, London, W.1, £63,768 (recommended); William Willett, Ltd., £63,781; M. Howard (Mitcham), Ltd., £65,293; Robert Hart and Sons, Ltd., £66,850; Pauling and Co., Ltd., £66,858; T. R. Roberts (Builders), Ltd., £67,626; J. Garrett and Son, Ltd., £72,966; Stirton Partners, Ltd., £74,689.

West Hartlepool, Dur.—Ninety-two houses at Owton Manor, for B.C. A. G. Sinclair, borough architect: G. M. Pearson and Son, Front Street, Hetton, Co. Durham, £125,691.

Westminster.—Two hundred and fifty-eight flats in eight blocks at section IV of

Churchill Gardens, for City Council: Gee, Walker and Slater, Ltd., 100 Park Lane, London, W.1, £573,307 (fixed-price tender, recommended, subject to Ministry approval); M. J. Gleeson (Contractors), Ltd., £578,818; Rowley Bros., Ltd., £582,000; C. Miskin and Sons, Ltd., £602,568; Walter Lawrence and Son, Ltd., £605,999; J. Jarvis and Sons, Ltd., £607,390; Y. J. Lovell and Son, Ltd., £610,891; J. Gerrard and Sons, Ltd., £628,014; Wilson Lovatt and Sons, Ltd., £637,400.

MATERIALS AND SUPPLIES

Doncaster, Yorks.—Supply of 2,500 dustbins for the year commencing April 1, 1960, for B.C.: Thomas Hill (Successors), Ltd., Stourbridge, £1 9s. 1½d. each.

PLANT AND MECHANICAL TRANSPORT

Barnsley, Yorks.—Supply of two B.M.C. 3½-ton diesel lorries, for B.C.: Eyre Bros., (Barnsley), Ltd., Eldon Street, Barnsley, £1,081 each (recommended).

Chatham, Kent.—Supply of a Smith Series S paper baler, for B.C.: Municipal Supplies, Ltd., 2 Robert Street, London, W.C.2, £889 (recommended).

Dewsbury, Yorks.—Supply of a Broomwade rotary type compressor, for B.C.: W. G. Search, Ltd., Market Mills, Whitehall Road, Leeds, 12, £1,359 (recommended).

Holywood, Down.—Supply and delivery of one

5½-ton concrete mixer, for U.D.C.: Hendron Bros. (Belfast), Ltd., 8-16 Eliza Street, Belfast, £190, less 2½ per cent. (accepted); Norman Macnaughton and Sons, Ltd., £190; Robert Kirk, Ltd., £193; Frederick Parker, Ltd., £182; McNeill (Engineering), Ltd., £175; Ransomes and Rapier, Ltd., £194; George Cohen, Sons and Co., Ltd., £182; The Liner Concrete Machinery Co., Ltd., £182; Millais Machinery Co., Ltd., £182.

Swinton and Pendlebury, Lancs.—Supply of muledozer, for B.C.: Mobile Power (London), Ltd., Enfield, £1,230 (recommended).

Walthamstow, Essex.—Supply of a mechanical scraper for the storm water tanks at Low Hall Farm, for B.C.: Hartleys, Stoke-on-Trent, Ltd., £8,545 (recommended).

Wandsworth.—Supply of a Karrier Bantam diesel engine tower wagon, for B.C.:

Clifford and Co. (Sidcup), Ltd., Sidcup, Kent, £1,455 (recommended).

Westminster.—Supply of two Karrier Bantam diesel motive units with full crew cab, for City Council: Rootes, Ltd., Devonshire House, Piccadilly, London, W.1, £2,282 (recommended).

PLAYING FIELDS, PARKS, ETC.

Bolton, Lancs.—Preparation of playing fields at Johnson Fold County Primary School, for B.C.: En-Tout-Cas Co., Ltd., Syston, Leicester (recommended). Estimated cost £1,975.

Lancashire.—Development of playing fields, layout of grounds and erection of fencing at Waterloo County Primary School, for the Co. E.C.: Maxwell M. Hart, Ltd., 74 Corporation Street, Manchester, 4, £6,348.

Middleton, Lancs.—Levelling, draining and seeding of approximately three acres on the Parkfield Recreation Ground, for B.C.: Moulding Bros., 17 Randlesham Street, Prestwich, Manchester, £860.

RIVER AND FLOOD PREVENTION WORKS

Monmouthshire.—Deepening of the bed and widening of the channel of the River Ebbw, from the Navigation Colliery, Crumlin, to Glandwr Street, Aberbeeg, for Usk River Board: Direct Labour. Estimated cost £38,350.

RAILWAY ENGINEERING

British Railways.—Following contracts placed: Eastern Region:

Supply and erection of yard lighting and m.v. distribution system for Workshops marshalling yards—T. W. Sampson and Co., Ltd., Pitt Street, Sheffield, 1.

Cleaning and painting of bridges 32, 33 and 583 between Fenchurch Street and West Ham—A. Cameron, Ltd., Hamilton House, 839-841 London Road, North Cheam, Sutton, Surrey.

Supply and installation of additional equipment and modifications to existing equipment at Gas Factory Junction, Bethnal Green, Gidea Park and Stratford in connection with conversion from d.c. to a.c. electrification—The General Electric Co., Ltd., Witton, Birmingham, 6.

MICHIGAN

(GREAT BRITAIN) LTD.

As part of their general expansion programme Michigan (Great Britain) Limited is pleased to announce the following executive appointments to lead their sales and service division.

Michigan are on the move

A. H. HOUNSELL,
GENERAL SALES & SERVICE MANAGER



PETER MESSENGER,
HOME SALES MANAGER



BOB LOWMAN,
EXPORT SALES MANAGER



HARRY PURSE,
ASSISTANT HOME SALES MANAGER

Provision of a new car park at Bishop's Stortford Station—J. A. Elliott, Ltd., 133 Stansted Road, Bishop's Stortford.

Construction of new signal box at Tilbury (Riverside) Station—Haymills (Contractors), Ltd., Empire House, Hanger Green, Ealing, London, W.5.

Supply and installation of signalling and automatic warning system equipment in connection with electrification between Chelmsford and Colchester—The Siemens and General Electric Railway Signal Co., Ltd., East Lane, Wembley, Middx.

Supply and installation of traction supervisory cables between Liverpool Street, Chelmsford and Southend (Victoria) (Conversion to 50 c.p.s. a.c. traction)—Pirelli-General Cable Works, Ltd., Southampton.

Repairs to East Street and Longbridge Road overbridge 21 between Barking and Dagenham Dock—Samuel Butler and Co., Ltd., Bilton Way, Brimsdown, Enfield, Middx.

London Midland:

Supply and erection of structural steel-work for new platform awnings at London Road Station, Manchester—Boulton and Paul, Ltd., Riverside Works, Norwich.

Power signal box at Edge Hill, Liverpool—Sir Alfred MacAlpine and Sons, Ltd., Hooton, Little, Sutton, Wirral, Cheshire.

Reconstruction of bridge 76 on Timperley and Garston line to accommodate the widening of Woodland Avenue, for the Corporation of Liverpool—Leonard Fairclough, Ltd., 3 Chapel Street, Adlington, Lancs.

Reconstruction of St. Helens (Shaw Street) Station—Edward Wood and Sons, Ltd., 70 Park Street, Derby.

Reconstruction of bridge 24 on the Preston Junction to Blackburn line to accommodate road widening for the county borough of Blackburn—Wellerman Bros., Ltd., Dun Street, Sheffield, 3.

Supply, fabrication and delivery of steel-work for bridge 80 on the Trent Valley line—The Butterley Co., Ltd., Butterley, near Derby.

Supply and fixing of metal roof sheeting and decking to new platform awnings at London Road Station, Manchester—D. Anderson and Son, Ltd., Stretford, Manchester.

North Eastern Region:

Supply and erect shelving, racking and partitioning at Walker Gate stores depot: Rubery Owen and Co., Ltd., Wrexham.

Construction of a test embankment at Lamesley new marshalling yard: Richard Costain, Ltd., Newcastle.

Reconstruction of bridge substructure, reinforced part of superstructure and roadways and construction of a concrete water culvert at Lamesley new marshalling yard: Mitchell Construction Co., Ltd., Peterborough.

Scottish Region:

Signal boxes and yard buildings, Sighthill new goods depot, Glasgow—Angus M. MacDougall and Co., Ltd., Glasgow.

Construction of underpass and culvert, mains I and III, East Kilbride—Whatlings, Ltd., Glasgow.

Provision of automatic warning system, Cathcart Circle, Glasgow Central and Newton—The Westinghouse Brake and Signal Co., Ltd., London.

Southern Region:

Lancing Works: waterproofing of roofs—Turnerised Roofing Co., Ltd., London, S.W.11.

Ashford (Kent): modernisation of marshalling yard (earthworks and drainage)—J. W. Ellingham, Ltd., Maidstone, Kent.

Ascot: new car park—W. H. Gaze and Sons, Ltd., London, S.W.15.

Easteleigh Motive Power Depot: renewal of metal windows—Henry Hope and Sons, Ltd., Smethwick, Birmingham.

Crawley Goods Yard: construction of roads and coal pens—Geo. Wimpey and Co., Ltd., London, W.6.

Ashford (Kent) Motive Power Depot: improvements to staff accommodation—C. I. Epps and Sons, Ltd., Ashford, Kent.

London Bridge signal box: renewal of windows—The Demolition and Construction Co., Ltd., London, S.W.1.

Dursford Road (Wimbledon) repair shop: new heating plant (thermal installation)—R. J. Symons, Ltd., Esher, Surrey.

Basingstoke: replacement of goods lift—A. J. Dunning and Sons (Weyhill), Ltd., Andover, Hants.

ROADS, BRIDGES AND SITE WORKS

Aycliffe, Dur.—Roads and sewers, contract 185, precinct D.3, phase I, which comprises the construction of approximately 1,500 lin. yd. of roads with drystone foundations, concrete garage aprons and associated sewers from 9in. to 15in. in diameter, for Development Corporation: Direct Labour, £30,092 (recommended).

Ayr.—Reconstruction of Victoria Bridge in welded structural steelwork, for B.C. F. A. Macdonald and Partners, consulting engineers, 11 Woodside Terrace, Glasgow, C.3: Motherwell Bridge and Engineering Co., Ltd., P.O. Box 4, Motherwell, £45,337 (recommended).

Biggleswade, Beds.—Construction of roads, sewers and water mains at London Road housing site 4, Mead End, for U.D.C. T. Wilson, engineer and surveyor: Sidney Green and Sons, Ltd., Henley, £11,323 (accepted); Winton Hayes, Ltd., £13,584; Chas. Ball, Ltd., £13,418; Carden Miller, Ltd., £12,677; H. C. Janes, Ltd., £12,077; D. and H. Contractors, Ltd., £12,296; Farmiloe and McVie, £12,996; C. H. Linton, Ltd., £13,201; Blackwood Murray, £17,450. Work about to commence.

Bolton, Lancs.—Private street works in Wardle Street, Somerdale Avenue and Romney Road, for B.C.: J. W. Bradley, Hall Lane Works, Farnworth, near Bolton (recommended). Estimated cost £11,589.

Camberwell, Lond.—Kerb and paving works in parts of Old Kent Road and Rye Lane, for B.C.: Fitzpatrick and Son (Contractors), Ltd., 455 Old Ford Road, London, E.3, £1,956 (recommended).

Cannock, Staffs.—Construction of roads and sewers at central bus station, stage 1, for U.D.C., comprising the construction of 540 lin. yd. of 30ft. wide carriageways (part pitched construction with hot rolled asphalt surfacing, part reinforced concrete), 3,600 cu. yd. of excavation, 800 lin. yd. of sewers (6in.-21in.), together with other incidental works. E. Lomax, engineer and surveyor: J. Tierney, The Gables, 38 Church Street, Oxley, Wolverhampton, £14,662. Work just commenced.

Canvey Island, Essex.—Roads and sewers to serve 190 dwellings, four shops and 47 garages (second stage of development), for U.D.C.: Davis Contractors, Ltd., 352 Kilburn High Road, London, N.W.6, £111,961 (recommended).

Cardiff.—Making-up of Newport Street Lane and Verlands Close, for City Council: T. Gallagher and Sons, Bridgend, £732, and Walby, Ormandby and Sage (Talbot Green), £2,134, respectively (recommended).

Carlisle, Cumb.—Improvement of junction at Victoria Viaduct and James Street, for City Council: Border Engineering Contractors, Ltd., 125 Queen Street, Whitehaven, £14,884 (recommended).

Chislehurst and Sidcup, Kent.—Widening and reconstructing approximately 4-mile of A.222 Perry Street, Chislehurst, involving 14,500 sq. yd. of 8in. reinforced concrete and 4in. hot rolled asphalt surfacing, 1,100 lin. yd. of 12in. and 9in. storm water sewers, kerbing, footways, retaining walls, etc., for U.D.C. W. B. Farrow, engineer and surveyor: Mowlem (Civil Engineering), Ltd., 91 Ebury Bridge Road, London, S.W.1, £86,965. Work commencing March.

Doncaster, Yorks.—Following works, for B.C.: Surfacing of Bawtry Road—North Lonsdale Tar Macadam, Ltd., Albion Works, Sheffield, 4, £3,755; kerbing and reinstatement of footpath, Beckett Road—McCann, Fleming and Moran, Ltd., 197 Handsworth Road, Sheffield, 13, £3,290 (recommended).

Provision of flagged footpaths to serve the three-storey flats and N.F.I. type houses in Middleham Road, Goodison Boulevard and Wensley Crescent, Cantley estate, stage Va—McCann, Fleming and Moran, Ltd. Estimated cost £1,200.

Dukinfield, Cheshire.—Roads and sewers for 160 houses at Yew Tree Lane, site 3, for B.C.: Middleton and Co. (Blackpool), Ltd., Bank Street Sidings, Blackpool, £15,306 (recommended).

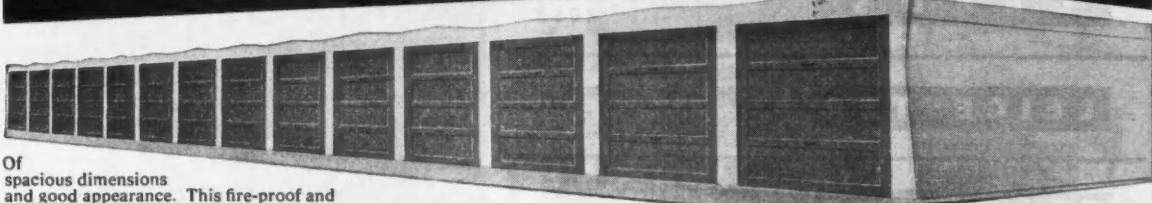
Hazel Grove and Bramhall, Cheshire.—Reconstruction and improvement of Mill Lane, Hazel Grove, for U.D.C. J. Fleming Andrew, engineer: Nortons (Road Construction), Ltd., Sandy Lane, Whalley, Macclesfield, £10,148.

Iford, Essex.—(a) Improvement of Roding Lane South and (b) the reconstruction of Coventry Road, Perth Road and Wellesley Road, for B.C.: W. and C. French, Ltd., Epping New Road, Buckhurst Hill, Essex, £6,929 and £24,339, respectively (recommended).

Maldon, Essex.—Construction of roads and sewers at Northend housing site, Southminster. The work comprises the construction of 5,150 super. yd. of carriageways and garage spaces (part tarmacadam and part concrete construction), 180 lin. yd. kerbing, 2,900 cu. yd. excavation, 1,100 lin. yd. sewers (6in.-12in.), together with other incidental works, for R.D.C. I. M. Nicholson, engineer and surveyor: J. Nunn and Sons, Ipswich, £14,170 (accepted); W. Crossman and Sons, Ltd., £14,434; Mannion Bros. (Harrow), Ltd., £15,310; R. W. Hill and Co., Ltd., £15,660; Roadworks (1952), Ltd., £15,792; J. H. Cottam, Ltd., £16,352; Road and Public Works, Ltd., £17,599; T. J. Evers, Ltd., £18,327; East Anglian Roadstone Transport Co., Ltd., £18,355; Edward J. Edwards (Norwich), Ltd., £20,405; Essex Plant and Contracts, Ltd., £23,939; Messrs. Crane, £26,149. Work commencing March.

Northamptonshire.—Improvement of the London-Carlisle Trunk Road, A.6, at High Street South, Rushden, near The Compasses Inn, for C.C. R. N. Sanders, county surveyor: Kettler and Heron, Ltd., Cliftonville, Northampton, £9,829. Work commencing immediately.

MARLEY MULTIPLE GARAGES IN PRECAST CONCRETE



Of spacious dimensions and good appearance. This fire-proof and rot-proof garage is available in four types—high front, high back, back-to-back and stepped with Marley up-and-over or traditional timber doors. Low initial cost. Virtually maintenance free. Marley will supply and deliver only or supply and erect. Installed for hundreds of Local Authorities. Site work can also be undertaken, if required. We shall be pleased to submit quotations on request. Marley make the best garages.

MARLEY CONCRETE LIMITED, Dept. 1491, Peasmash, Guildford, Surrey (Head Office), Guildford 62986. Shurdington, Nr. Cheltenham, Glos. Shurdington 334/5. Hatchpond Road, Waterloo, Poole, Dorset. Broadstone 626. London Showrooms: 251 Tottenham Court Road, W.1.

Portsmouth. — Following works, for City Council: Making-up of Hamilton Road and Zetland Road—Direct Labour, £1,628 and £2,104, respectively (recommended); Roads Reconstruction, Ltd., £1,945 and £2,113; Warings (Contractors), Ltd., £2,000 and £2,800; Jno. Croad, Ltd., £2,200 and £2,670; Austen Shrires, Ltd., £2,221 and £2,623.

Making-up Gloucester Terrace and Gloucester Place. Roads Reconstruction (1934), Ltd., Salisbury, £3,117 (recommended); Warings (Contractors), Ltd., £3,255; Austen Shrires, Ltd., £3,313; Direct Labour, £3,345; Jno. Croad, Ltd., £3,546.

Construction of a service road to the aged persons homes at St. Mary's Road: Warings (Contractors), Ltd., London Road, Hulme, Portsmouth, £2,316 (recommended); Percy Bilton, Ltd., £2,492; Jno. Croad, Ltd., £3,100; Southern Counties Construction Co., Ltd., £3,163; Surface Maintenance Services, £3,315.

Construction of roads and sewers for Furze Lane development and service roads at Eastern Road/Hayling Avenue and to serve the Sevenoaks Road area: Direct Labour (recommended). Estimated cost £8,500, £8,000 and £5,000, respectively.

Preston, Lancs. — Reconstruction of Fletcher Road from Sellers Street to West View, for B.C. The work includes excavation, laying of approximately 1,160 sq. yd. of reinforced concrete kerbing and flagging: A. Brett (Contractors), Ltd., Station Buildings, Grimsargh, near Preston.

Prestwich, Lancs. — Laying approximately 6,400 sq. yd. of 1in. thick fine cold asphalt with precoated chippings, for B.C. J. Theo. Kilner, borough engineer: N. E. Box, Ltd., Altrincham. Work commencing within one month.

St. Pancras. — Reconstruction of the Prince Albert Road canal bridge, for B.C.: James Crosby and Sons, Ltd., 59 Queen's Gardens, London, W.2, £59,561 (recommended).

Salisbury, Wilts. — Reconstruction of Wilton Road, A.36, for City Council: Surface Maintenance Services, Ltd., Durham House, 124 Old Christchurch Road, Bournemouth, Hants, £2,881.

Sandown and Shanklin, I. of W. — Extension of the existing Shanklin cemetery off Sandown Road, Lake, for U.D.C., consisting of the construction of footpaths, surface water drainage, provision of three belt and other ancillary works. T. Josey, surveyor: S. L. Whittington, Bramstone, Chale, I. of W., £1,879.

Sheerness, Kent. — Reconstruction of North Street and South Street, for U.D.C. K. Scott, engineer and surveyor: A. H. Hooker and Sons, Ltd., Leeds, near Maidstone, Kent, £10,502 (accepted); Bensted Contractors, Ltd., £9,619; Johnson Bros. (Aylesford), Ltd., £11,910; T.H. Contractors, Ltd., £11,340. Work commencing April.

Shorne, Kent. — Construction of forecourt to serve two lock-up garages in hardcore and tarmacadam, for Denton Builders, Ltd.: Hodsons, Ltd., 17 Wrotham Road, Gravesend.

Southport, Lancs. — Asphalt surfacing work at traffic roundabout at junction of Scarisbrick New Road and Meols Cop Road, for B.C.: Trinidad Lake Asphalt Co. (North Western), Ltd., India Buildings, Water Street, Liverpool, 2 (recommended). Estimated cost £636.

Stretford, Lancs. — Resurfacing work, for B.C.: Chatsworth Road—J. A. Utley, Ltd., Albany Road, Chorlton-cum-Hardy, Manchester, £2,240; Kings Road—Apex Asphalters, Ltd., Owen Street, Stockport, £1,052 (both recommended).

Walthamstow, Essex. — Improvement of Shernhall Street, from Forest Road to Prospect Hill, for B.C.: Percy Bilton, Ltd., 113 Park Street, London, W.1, £15,699 (recommended).

Watford, Herts. — Bituminous surfacing of Marlborough Road to Upton Road, for B.C.: Constable, Hart and Co., Ltd., Lion House, Red Lion Street, Richmond, Surrey, £1,195 (recommended).

Witney, Oxon. — Church Lane/Stanton Harcourt Road reconstruction, for U.D.C. C. A. Warner, engineer and surveyor: Clark Bros., Stratton Road, Swindon, Wilts., £6,783.

Workington, Cumb. — Reconstruction of Gladstone Street, for B.C.: Eden Construction Co., Ltd., English Damside, Carlisle, £828 (recommended).

SEWERAGE, SEWAGE AND REFUSE DISPOSAL

Alnwick, Northumb. — Construction of sewerage works at Boulmer, for R.D.C. D. Balfour and Son, consulting engineers, 131 Victoria Street, Westminster, S.W.1: Alston Limestone Co., Ltd., Alco House, Lynnwood Terrace, Westgate Road, Newcastle upon Tyne, £17,703 (accepted, subject to Ministry approval); R. Carse and Son, Ltd., £18,201; McLaren and Co. (Belford), Ltd., £18,101; Walter G. Birch (Harrogate), Ltd., £22,897;

W. S. Sample, £19,077; Chas. G. Inkster, £19,567; Tarslag, Ltd., £19,976; C. S. Bunch and Sons, £23,517; R. Slawther, £18,000; Gustavus Bailey, Ltd., £24,807.

Aylesbury, Bucks. — Construction of the Grendon Underwood sewerage and sewage disposal scheme, for R.D.C.: Turriff Construction Corporation, Ltd., Budbrooke Road, Warwick, £49,697.

Barnsley, Yorks. — Provision of humus tank de-sludging equipment for the primary humus tanks, for the new A.D.F. pumping station, for B.C.: William E. Farmer, Ltd., 82 Victoria Street, London, S.W.1, £2,187 (recommended).

Brixworth, Northants. — Construction of extensions to the sewage disposal works at Moulton, near Northampton, consisting of screening, storm overflow and recorder chambers, settling tank, 52ft. 6in. diameter percolating filters, humus tank, storm water tank, pumping station, sludge storage lagoon and attendant pipework, drains, paths and roads, etc., for R.D.C.: Pick, Everard, Keay and Gimson, consulting engineers, 6 Millstone Lane, Leicester; Tandy and Richmond, Ltd., Pitsford Brickworks, near Pitsford, Northampton (subject to Ministry approval).

Coleraine, Londonderry. — Construction of Jubilee Terrace urban drainage scheme, for B.C. K. H. Hill, borough surveyor: John Rainey (Construction), Ltd., Coleraine Road, Portrush, £15,802 (accepted); J. Kennedy and Co., £17,770; R. J. Pattison Nutt and Sons, £16,240. Work to commence in March.

Cannock, Staffs. — Supply and installation of four bogie-mounted sewage distributors operated by an existing cable drive, each distributor to span approximately 40ft. and have a peak discharge capacity of 750,000 gallons per day, for U.D.C. E. Lomax, engineer and surveyor: Hartleys (Stoke-on-Trent), Ltd., Stoke-on-Trent, £5,223 (subject to Ministry approval).

Dorking, Surrey. — Following, for U.D.C.: (a) Surface water sewer, A.25, Westcott—approximately 180 lin. yd. of 6in. and 170 lin. yd. of 9in. diameter sewer; (b) road improvement works, CX54, Middle Street, Brockham—(a) Austen Shrires, Ltd., Orestan Lane, Effingham, Surrey, and (b) Conway and Hart, 149 Croydon Road, Penge, S. E.20.

Formby, Lancs. — Construction of the new sewage disposal works at Formby, comprising the following: Inlet works and pumping

ROAD ROLLERS LIMITED

formerly

OIL ROAD ROLLERS LTD.

and W. T. PALMER & CO. (LEICESTER) LTD.

Head Office: 928 Melton Road, Thurmaston, Leicester

BIRMINGHAM

YARDLEY WOOD RD., MOSELEY
TEL. BIRMINGHAM 3 811-3

LEEDS

BRADFORD ROAD, TINGLEY
TEL. MORLEY 4 053

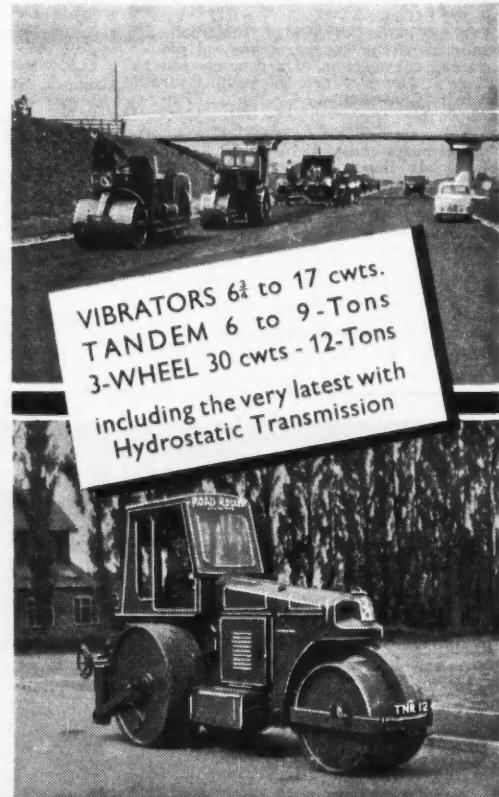
LEICESTER

MELTON ROAD, THURMASTON
TEL. SYSTON 3 357-8

ST. HELENS

HAYDOCK LANE, HAYDOCK
TEL. ASHTON-IN-MAKERFIELD 7 284

A NATIONAL ROAD ROLLING SERVICE



station; sedimentation tanks; storm water tanks; filter beds; humus tanks; sludge drying beds, for U.D.C. Husband and Co., consulting engineers, 388 Glossop Road, Sheffield, 10; William Becker and Sons, Ltd., Station Works, Byron Road, Great Crosby, Liverpool, 3. Work to commence in the near future.

Hampstead.—Construction of new manholes, comprising access shafts, to avoid brick sewers, for B.C.: D. R. Paterson, Ltd., 33 Granville Road, London, N.W.2 (recommended). Estimated cost £8,000.

Hertfordshire.—Construction of the following works at Maple Lodge Digestion Plant, contract W.11, for the West Hertfordshire Main Drainage Authority: Two primary sludge digestion tanks, capacity 760,000 gallons each; six secondary sludge digestion tanks, capacity 485,000 gallons each; two sludge consolidation tanks, capacity 250,000 gallons each; one sludge pumping station and all necessary pipelines, manholes, ducts, culverts, roadways and other appurtenant works. John Taylor and Sons, consulting engineers, Artillery House, Artillery Row, Victoria Street, Westminster, London, S.W.1; Kettler and Heron, Ltd., Hollybank, Cliftonville, Northampton, £234,351.

Huddersfield, Yorks.—Construction of rectangular filter beds (approximately 83,000 cu. yd. capacity), settlement tanks (two 130ft. diameter), sluice tank (one 60ft. diameter), pumping stations, pipelines and ancillary works at Heaton Lodge sewage treatment works, near Huddersfield, for B.C. A. L. Percy, borough engineer and surveyor: R. T. Haley and Co., Ltd., Hunsorth, Cleckheaton, Yorks.

North Westmorland.—Laying of about 1,810 lin. yd. of 6in. diameter reinforced concrete pipe sewers, and the construction of 34 manholes at Hartley, near Kirkby Stephen, for R.D.C. Fairbank and Son, consulting engineers, 62a Bootham, York: P. A. Baines and Son, Culgaith, Penrith, Cumberland, £7,526. Work commencing April.

Torpoint, Corn.—Laying of 49yd. of 6in. dia. 78yd. of 7in. dia. and 101yd. of 9in. dia. glazed stoneware sewers and the construction of four manholes, for U.D.C. G. H. Ivory and Partners, consulting engineers, 24 Athenaeum Street, Plymouth: Northcotts of Exeter, Ltd., Venny Bridge, Whipton, Exeter, £2,239.

Towcester, Northants.—Main drainage of Towcester and Paulerspury, T32/3, contract 1, for R.D.C., comprising the construction of approximately nine miles of 6in. to 18in. diameter sewers and rising mains, two sewage pumping stations, a sewage disposal works, and other ancillary works. Howard Humphreys and Sons, consulting engineers, Victoria Station House, Victoria Street,

London, S.W.1: Chapman and Dowd, Ltd., Butlin Street, Birmingham, 7, £179,083. Work commencing March.

Vaynor and Penderyn, Brecons.—Alterations and extensions to sewage disposal works at Cefn Coed, for R.D.C. Thomas and Morgan and Partners, 23 Gelliwastad Road, Pontypridd: Davies, Middleton and Davies, Ltd., Phoenix Works, Caerphilly Road, Cardiff, £16,000.

STREET LIGHTING

Barnsley, Yorks.—Supply of following for improvements to public lighting in Park Road, Keresforth Hill Road and Broadway, for B.C.: Lanterns—A.E.I. Lamp and Lighting Co., Ltd., Trafford Park Road, Manchester, 17, £918; concrete columns—Stanton Ironworks Co., Ltd., Nottingham, £2,293 (both works).

Cannock, Staffs.—Group A lighting scheme for route B.4154 from Cross Keys Hotel to junction with B.5012, Heath Hayes, and group B lighting scheme for various roads throughout the urban district, for U.D.C. E. Lomax, engineer and surveyor: Engineering and Lighting Equipment Co., Ltd., Sphere Works, Campfield Road, St. Albans, £2,767.

Dalton-in-Furness, Lancs.—Lighting of main road from the Barrow boundary to the top of Crooklands, for U.D.C.: Engineering, Lighting and Equipment Co., Sphere Works, St. Albans, Herts. Estimated cost £6,000.

GOVERNMENT CONTRACTS

Admiralty.—Contracts over £1,000 in value placed by the Civil Engineer-in-Chief's Department:

Hampshire: repainting of beach gates—Metalisation, Ltd., Dudley; roofing—Weatherall Roofing Co., Ltd., Gravesend; construction of water tank and steel tower—Braithwaite and Co., Structural, Ltd., Great Bookham, Surrey.

Berkshire: internal painting—J. and B. Abbott (Contractors), Ltd., Harrow.

Dunbartonshire: construction of mess hall and latrines—Dougall and Co., Ltd., Dumfarton.

Air Ministry.—Contracts to the value of £500 or over for the week ended Feb. 5:

Building work: Mossy Hill, Shetlands—William Tawse, Ltd., Angusfield, Aberdeen. Road surface work: Cosford, Staffs.—Bristowes Tarvia Contracting, Ltd., Dysart Road, Grantham, Lincs.

Artificers' work: Bawtry (Doncaster, Yorks.), etc.—G. Chessman, Ltd., Scotter Road, Scunthorpe, Lincs.; Thorne Island

(Emsworth, Hants), etc.—Marsh (Emsworth), Ltd., 31a North Street, Emsworth, Hants; Greatworth (Banbury, Oxon)—J. H. Woodward (Contractors), Ltd., Eastfield Road, Leamington Spa, Warwickshire.

Electrical installations and internal wiring work: Eastleigh, East Africa—Berkeley Electrical Engineering Co. of Africa, Ltd., P.O. Box 9069, Nairobi, Kenya, British East Africa.

Post Office.—Contracts for duct laying, etc., works to the value of £500 and over placed for the week ended Feb. 6, 1960:

Ashe Bros., 7 Marvell Avenue, Hayes, Middx.; Alec Astbury, Pen-y-Fford, Chester; P. A. Baines and Sons (Northern), Ltd., Culgaith, Cumb.; P. J. Burke, Ltd., Park Street, Wombwell, Barnsley, Yorks.; C.D.L. Construction Co., Ltd., Church Road, Egham, Surrey; Christie and Co. (Contractors), Ltd., Raemoir Road, Banchory, Kincardines.; James Cooper (Construction), Ltd., 28 Kensington Church Street, London, W.8; E. and B. Contractors, 24 Alyn Drive, Pen-y-Fford, Chester; The Eden Construction Co., Ltd., English Damside, Carlisle, Cumb.; W. Emerson, Ashby, Spilsby, Lincs.; George H. Graham (Contractors), Ltd., District Bank Chambers, Market Street, Huddersfield, Yorks.; P. Lowry and Sons, Ltd., Sussex Road, Southall, Middx.; J. Murphy and Sons, Ltd., 43 Charteris Road, Finsbury Park, London, N.4; The North Midland Construction Co., Ltd., Portland Works, Daybrook, Nottingham; The Northwest Construction Co., Ltd., Litherland, Liverpool, 21; J. O'Malley and Co., Ltd., 17 Vaughan Avenue, Doncaster, Yorks.; Robert Paterson and Sons, Ltd., Milton Street, Airdrie, Lanarks.; T. E. Taylor, 17 Edward Street, St. Philips, Bristol, 2; Alexander Thomson and Co. (London), Ltd., 45a Kensington High Street, London, W.8; P. J. Walls and Bros., Ltd., Sainthill Road, Carryduff, Belfast.

War Department.—Contracts placed for the week ended Feb. 5:

Hampshire (Deepcut): redecoration—Fields Ltd., Reading.

Kent (Maidstone): painting and decorating—Alfred Bagnall and Sons, Ltd., Teddington; (Shorncliffe): building—William Dunk, Ltd., Folkestone (Gillingham): painting and decorating—Arnold Sharrocks, Ltd., London, S.W.11.

Midlothian (Edinburgh): miscellaneous—Robert Neish, Ltd., Edinburgh.

Shropshire (Oswestry): roadwork—Henry Williams and Son (Roads), Ltd., Wrexham.

Suffolk (Ipswich): building—Cubitt and Gotts, Ltd., Ipswich.

Wiltshire (Chiseldon): building—Wain Bros. (Contractors), Ltd., Swindon.

VAL DE TRAVERS

FOR ASPHALTE • TARMACADAM • FELT ROOFING

LONDON • BARROW • BIRMINGHAM • CANTERBURY • EXETER • GLASGOW • LINCOLN • LIVERPOOL • MANCHESTER • NEWCASTLE



'GEOP' Traffic Controls can be designed to suit your particular problem. Full details from

GEORGE PIKE LIMITED

BELFAST CARDIFF LONDON PETERBOROUGH EQUIPMENT WORKS ALMA STREET BIRMINGHAM 6 GLASGOW MANCHESTER STOCKTON



Write now for
Publication 19/RO2

**When you want
a rotary compressor—
make it a Holman Rotair**

Only the Holman Rotair portable rotary screw compressor gives an output of up to 600 cubic feet a minute at 100 p.s.i. in one stage. Temperature rise is only 100°F above ambient. No timing gear is employed in the Rotair—so additional reliability is ensured. *With all these compressor advantages too . . .*

Pulseless Output
Negligible Compressor Maintenance
Minimum Friction
Light Weight
Only Two Moving Parts and
Four Bearings

★ THE ROTAIR 370 IS NOW IN PRODUCTION

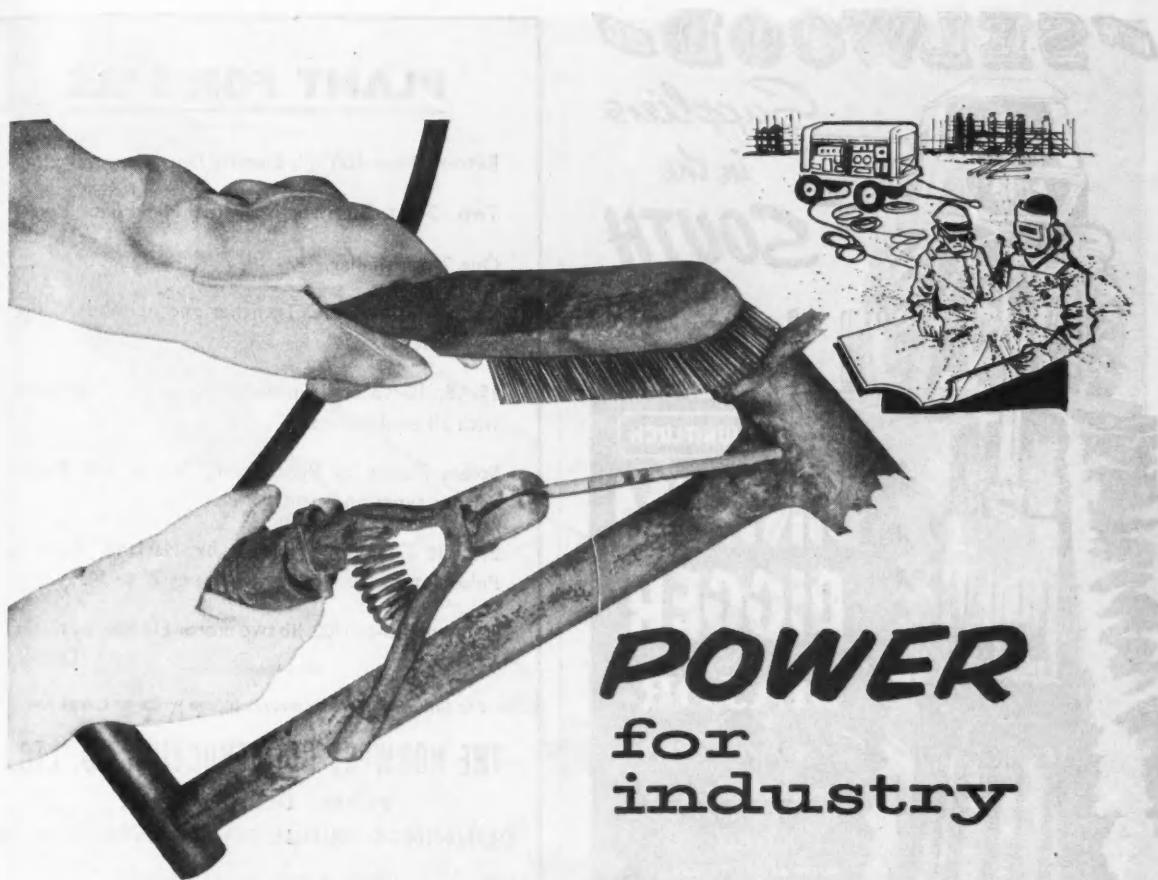
**600
370***

Air... compressed air... power... Holman

Holman Bros. Limited, Camborne, England; Camborne 2275 and at 44 Brook Street, London W.1; Hyde Park 9444
Also in Birmingham • Cardiff • Glasgow • Peterborough • Sheffield. Australia • Canada • East Africa • France
India • South Africa • Spain • U.S.A. • West Africa. With Agents and Representatives throughout the world.

HM4B





POWER for industry

Our range of industrial engines are a practical proposition for many types of industrial equipment . . . compressors, cranes, pumps, contracting equipment, earth borers, generators, railcars, welding plant, works trucks, tractors and conversions. Simple design, modern flow-line production methods and common interchangeable parts contribute to the low cost of these high efficiency engines. And remember, every engine is fully backed by a

World-wide Parts and Service Organisation. Take your choice from a wide power range... Diesel 20 to 86 b.h.p. and Petrol 11 to 87 b.h.p. (12-hr. rating).

DIESEL ECONOMY

— have you considered the replacement of existing power units in your equipment and trucks with the famous 4D Diesel engine? You'll have the unique advantages of economy, long-life and low running costs . . . plus the best service in the World!



Wherever you are, whatever your problem,



MOTOR COMPANY LIMITED • ENGLAND

are at your service

For further details of our

INDUSTRIAL ENGINES

and the equipment they power,
send the coupon to your nearest Ford Dealer
or direct to

FORD MOTOR COMPANY LIMITED • PARTS DIVISION (GS1) • AVELEY DEPOT • SOUTH OCKENDON • ROMFORD • ESSEX • ENGLAND

Please send me technical brochures of your *PETROL/
DIESEL Industrial Engines. The maximum B.H.P. required
is at R.P.M. Also, please send details
of the following equipment powered by your engines.

.....

Name.....

Address.....

Nature of Business.....

Telephone No.

GS1-49-2

* Delete where not applicable

W.R. SELWOOD LTD.



Suppliers in the
SOUTH and WEST

for the **WHITLOCK**

DINKUM DIGGER MAJOR

Sales - Hire - Service

CHANDLER'S FORD, HANTS.
Phone 2275
and
Marsh Barton Rd., EXETER.
Phone 72375

PLANT FOR SALE

Butters 3-ton 100' Jib Electric Derrick.

Two 30-cwt. Rushworth all-steel Hand Derricks.

One 2-ton similar.

Barber-Greene 44C Trencher recent model—digs to 7' deep.

19-RB, 10-RB and Smith-420 Excavators complete with all equipments.

Steam Pumps by Pulsometer, Tangye and Evans, various types and sizes.

Electric Centrifugal Pumps by Harland, Labour, Pulsometer etc. Various capacities 2" to 5".

Rushworth 5-ton 100' Jib two motor Electric Derricks.

For full details of the above, please write or telephone

THE NORWEST CONSTRUCTION CO. LTD.
PLANT DEPARTMENT,
DUNNINGS BRIDGE ROAD, LIVERPOOL 10

Phone: Aintree 3651 Extension 28

hidden
for your replacement
caterpillar track

Laboratory and field tests have proved that the increased percentage of manganese and chrome content of 'Star Steel'

Links will give you PROLONGED LIFE AT LOWER COST!

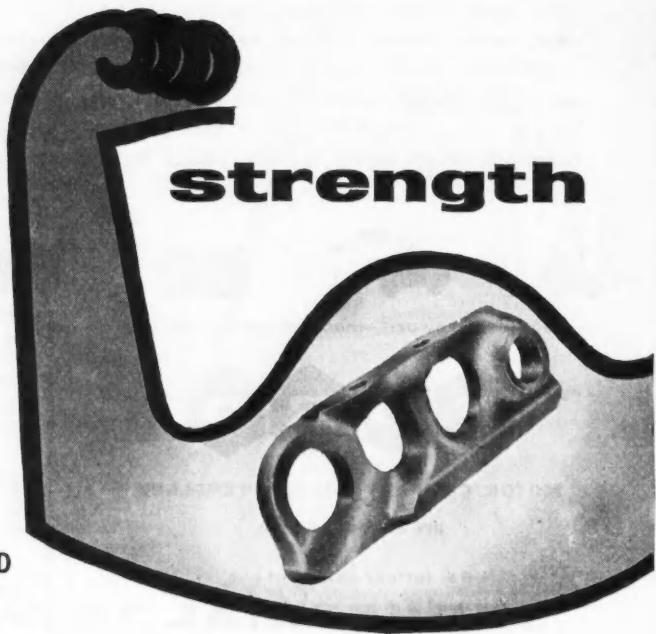


SOLE U.K. DISTRIBUTORS:

DERBYSHIRE TRACTOR SERVICE LIMITED

BRIMINGTON ROAD NORTH • WHITTINGTON MOOR • CHESTERFIELD
Telephones: CHESTERFIELD 3167/8 & 4235 Grams: "SERTRAC, CHESTERFIELD"

SPARE PARTS, SALES & SERVICE FOR CATERPILLAR-BUILT TRACTORS & ALL OTHER EARTH MOVING EQUIPMENT





TRAXCAVATORS

for HIRE

from

GEORGE COHEN

SONS AND COMPANY LIMITED

PLANT HIRE SERVICE



WOOD LANE, LONDON, W.12. Telephone: Shepherds Bush 2070 • STANNINGLEY, Nr. LEEDS. Telephone: Padley 2341 • KINGSBURY,
Mr. TAMWORTH. Telephone: Ashfield 1191/2/3 and Burley 381/3 • MANCHESTER. Telephone: Pendleton 4611/6 • NEWCASTLE,
Telephone: Newcastle 23313 • SHEFFIELD. Telephone: Shaffield 42033 • GLASGOW. Telephone: Langside 6131 • SWANSEA,
Telephone: Swansea 71741 • SOUTHAMPTON. Telephone: Southampton 26116/9 • BELFAST. Telephone: Belfast 38211/2 • BATH. Telephone: Bath 5353

THE GREENHAM GROUP

Selected Items from Stock:—

DUMPERS

15cwt. **Benford**, Petter Diesel, excellent condition.
15cwt. **Liner Roughrider**, Petter Diesel, excellent condition.

CONCRETE MIXERS

5/3½ **Blaw Knox**, Ruston Petrol, on two pneumatic wheels, excellent condition.

7/5 **Benford**, Tilting Drum, Hopperfed. Petter Diesel, overhauled.

10/7 **Stothert and Pitt**, Petter Diesel, good working order.

10/7 **Stothert and Pitt**, Lister Diesel, very good condition.

10/7 **Rex**, Rotary Drum, Hopperfed, water tank, Ruston 1VTH Diesel. Excellent condition.

14/10 **Rex**, Rotary Drum, Hopperfed, water tank, Ruston 1VSH Diesel. Reconditioned. Choice of six.

14/10 **Rex**, as above but High Discharge. Choice of three.

14/10 **Rex**, electric motor, 400/440/3/50. Complete with integral weighgear.

21/14 **Stothert and Pitt**, Lister Diesel. Low discharge. Excellent condition. Choice of two.

CONCRETE PLANT

14 cu. ft. **Road Machines** Double-bucket Swing Weighbatcher, overhauled and repainted. Choice of four.

10-ton **Portasilo**, good condition, repainted.

30-ton **Portasilo**, rectangular discharge hopper, good condition, repainted.

Allam Poker vibrators electric, c/w flexible drive and Poker head. Very good condition. Choice of two.

Vibrosoil Compactors, J.A.P. Petrol, very good order.

each

MONO-RAIL EQUIPMENT

We have a large selection of Mono-Rail equipment in excellent condition. Power and trailer wagons, straight and curved rails, stands. Supplied in complete sets or as required.

PUMPS

2in. **Alcon**, Petrol Engine, good condition.

£175

3in. **Sykes** Petrol, lift and force model.

£175

6in. **Sykes** Diesel, centrifugal.

£90

3in. hand pump.

£195

Vac-Seal centrifugal Pump by **International Combustion, Ltd.** Capable of handling heavy proportion of solids. New 1954, Electric 400/440/3/50. First-class condition.

£195

HOISTS

A.C.E. and **B.H.C.** Scaffold Hoists, Petrol Engine, very good condition.

£195

each

5/7cwt. **Warry** J.A.P. Petrol, two pneumatics.

£25

7/10cwt. **Wickham** Static, Petter or Ruston Diesel, complete with masts, first-class order.

£325

10cwt. **Wickham** Static, Ruston Diesel, complete with masts. Choice of three machines. Excellent condition.

£475

15/20cwt. **B.H.C.** Centre Slung, Petter Diesel, overhauled, complete with Hopper.

£350

One 1958 **A.C.E.** 20cwt. Passenger Hoist "Sky-master." Serial No. 15258/23644. Includes eight 18ft. Mast sections and six electrically controlled gates. Fitted 15-man cage. Now erected in London, E.C.2., the hoist can be seen in operation until end of January.

£165

TRACTORS AND SHOVELS

D.8 **Caterpillar** 2U Series, complete with Birtley Hydraulic Bulldozer and Caterpillar C.C.U. Very good machine.

£275

each

£375

£25

£125

each

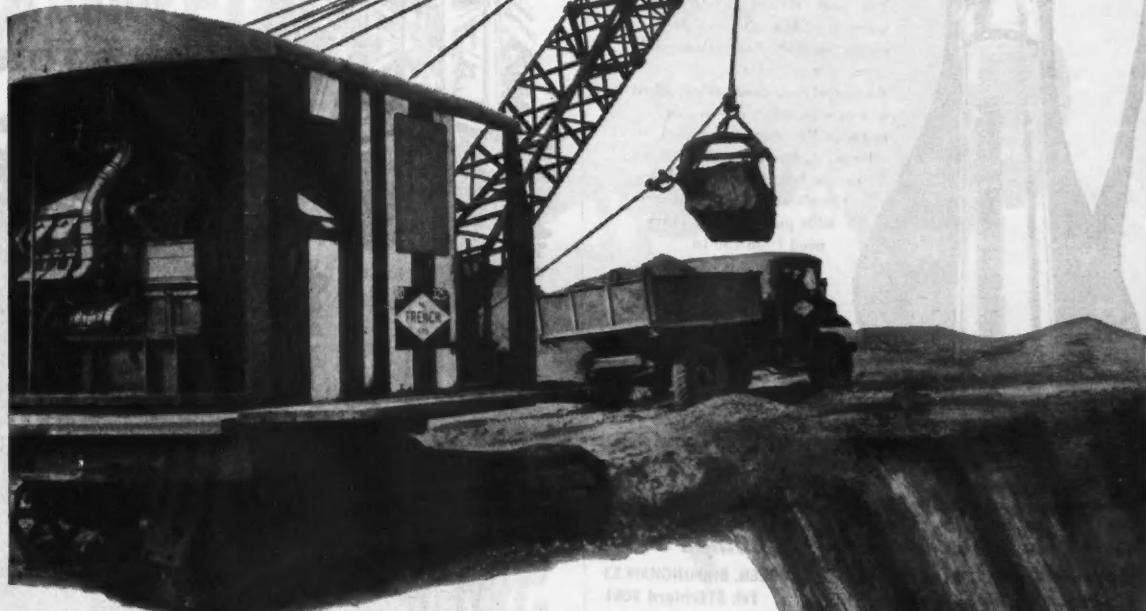
£2,500

each

£2,500

each

Wherever there is POWER there is PETTER...



on sites up and down the country
**PETTER AIR COOLED DIESELS TACKLE
 THE TOUGHEST JOBS—with reliability and economy**

POWER for this excavator owned by W. C. French Ltd., which shifts 500 to 600 cubic yards of ballast in an average day, is supplied by a Petter PDV6 aircooled diesel engine of 78 b.h.p. at 1,800 rev./min. This unit is robust, reliable, runs with the maximum economy, and is one of the larger engines in the range of 1½ to 108 b.h.p. supplied everywhere by Petter for dumper, excavators, batching plant, building and contracting equipment of all kinds. Every engine is thoroughly tested before delivery and is backed by outstanding spares and maintenance service. Over 40 service engineers, resident throughout the country, are available to give any assistance required in the field; each is equipped with a service van and all spares likely to be required.

Prospective power users are invited to ask our Technical Department for advice. In every way, you can rely on PETTER.

it goes much better powered by PETTER

SUPPLIED IN A RANGE FROM 1½-108 b.h.p.

ALSO WATER COOLED DIESELS FROM 3-48 b.h.p.



PETTERS LTD • STAINES • MIDDLESEX Tel: Staines 51333 A MEMBER OF THE HAWKER SIDDELEY GROUP





**WATER—GALLONS
OF IT—WHEREVER
AND WHENEVER
YOU WANT IT**

The most efficient way to raise water is with a submersible pump—and the best submersible pump is a Beresford. Rustproof, self-lubricating, silent and utterly reliable, you can install a Beresford pump and forget it, like thousands of people before you. And there's a Beresford submersible pump to suit every need from 150 to 100,000g.p.h. May we send you a copy of leaflet P.C.310?

BERESFORD | **submersible
pumps**

JAMES BERESFORD & SON LTD., ACE WORKS, KITTS GREEN, BIRMINGHAM 33
THE CORNRCROFT GROUP OF COMPANIES

Tel: STEchford 3081

BN250

Suppliers in SOUTH WALES

for the **WHITLOCK**



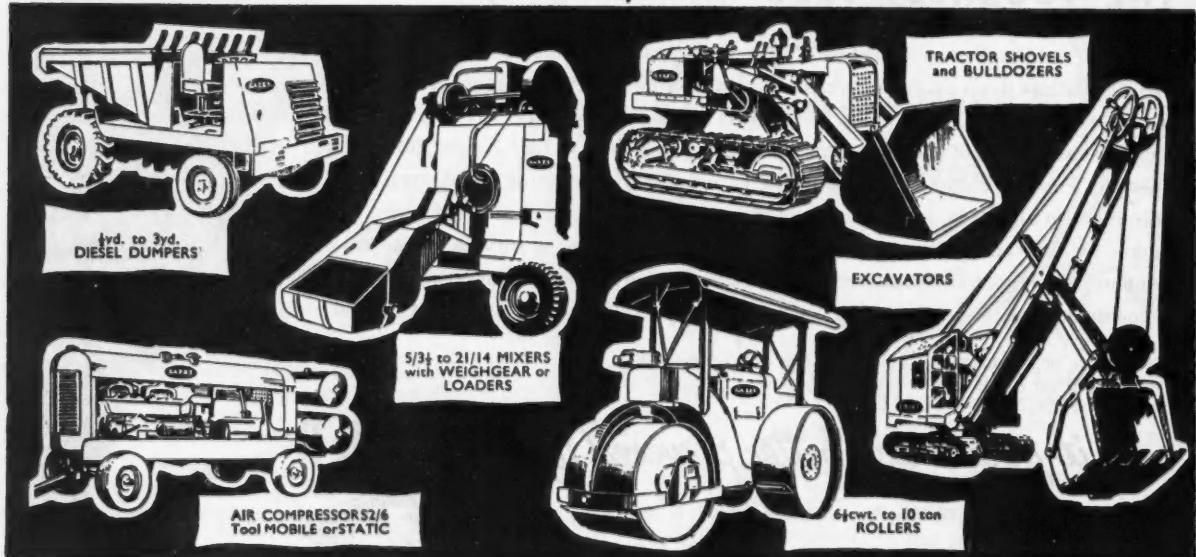
**DINKUM
DIGGER
MAJOR**

**O.L. DAVIES
LTD**

BAGLAN PLANT DEPOT
PORT TALBOT · GLAM
Tel: BRITON FERRY 3266 (2 lines)

Gazeway

**The Plant Hire
Service that goes
one better...**



At Gazeway we are available 24 hours a day to meet your requirements, so remember—whatever plant or equipment you need to buy or hire, contact Gazeway first.

TODAY'S WAY IS THE GAZEWAY

See our advertisement on the classified Plant pages

Portsmouth Road, Thames Ditton, Surrey.

**GAZEWAY
PLANT HIRE
LIMITED**

One of the GAZE Group of Companies

Telephone: EMBERBROOK 5511 & 6147 (Night 6147)

For new-look roads use the
power and precision
of the new-look
WAKEFIELDS



Models

104 104-SUPER

118-L6 118-D5

120

See that your Wakefields are kept hard at work—they thrive on it! Give them a scarifier and bulldozer attachment so they can break up hard, stony ground and fill in and level lowspots. Have them levelling sub-bases and maintaining levels during construction preparatory to compaction; spreading and grading aggregates and fillers; grading wet mixes. And of course send them on the haulage roads frequently to keep the surfaces good. There're plenty of jobs about for Wakefields to do—cash in on their ability to do hard work and plenty of it.

FEATURES

90, 100, 105, 115 or 130 b.h.p. Diesel Engines

Reliable hydraulic system giving finger-tip

control of all grading operations

Power-assisted steering

Constant-mesh Transmission

Chain or Gear Tandem Drive

OPTIONAL EXTRAS

Power-shift Moldboard

Scarifier

Bulldozer

Snowplough

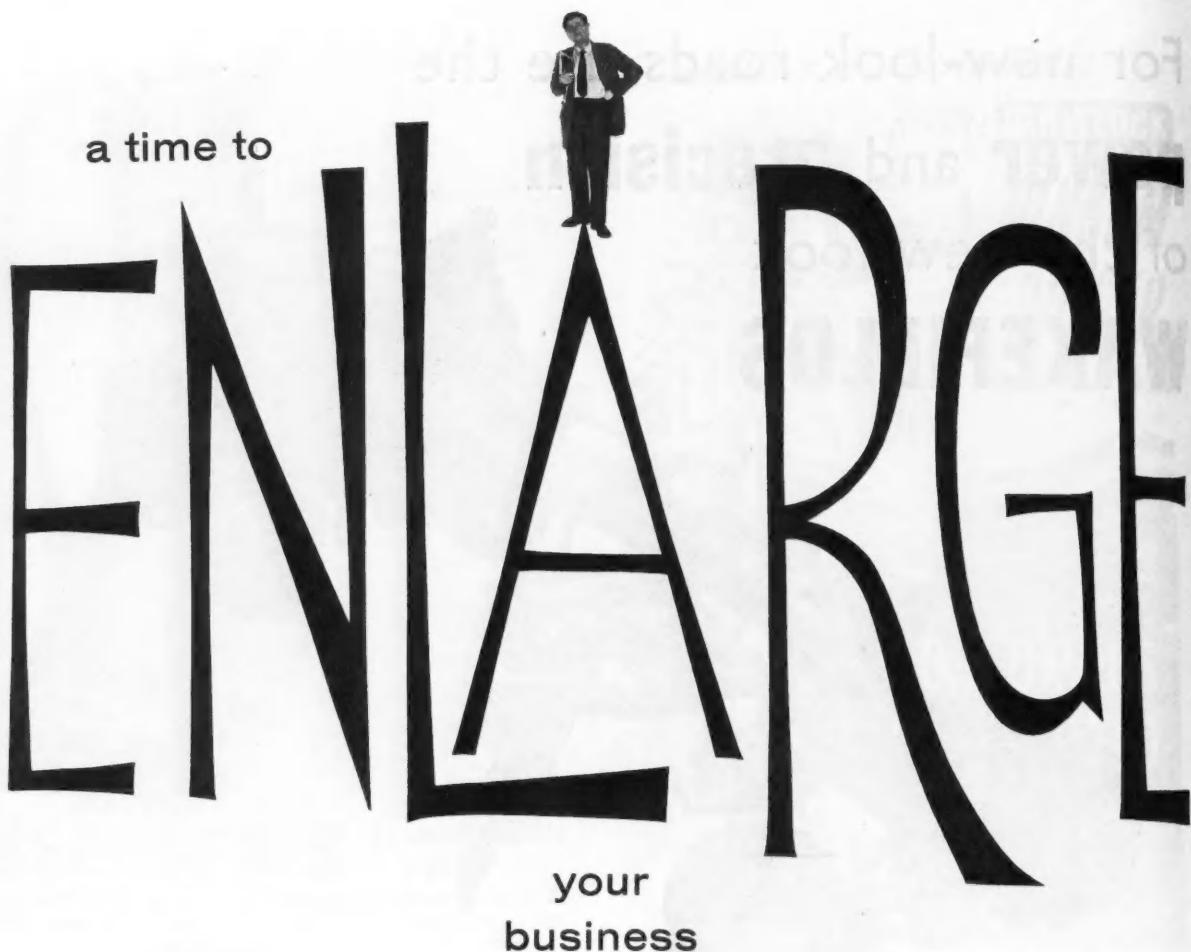
Cabs, etc.

WAKEFIELD

motor graders

CONSTRUCTION MACHINERY LTD., WAKEFIELD, ENGLAND. Distributors in most countries

WF6047



The most modern equipment is needed if a business is to prosper

and expand. It is here that Mercantile Credit can be of real assistance. As one

of the largest and oldest-established finance houses in the

country, Mercantile Credit offers to contractors hire purchase facilities which

are second to none in speed, efficiency and friendliness.

Write for full details or telephone our Head Office:



**MERCANTILE CREDIT
COMPANY LIMITED**

Argyll House, 246-250, Regent Street, London, W.1. Telephone: REGent 7222

Member of the Finance Houses Association

There are Mercantile Credit branches throughout the United Kingdom.

Please consult your local telephone directory for your nearest branch.

February 18 1960

THE CONTRACT JOURNAL

v b

Youngman PLANT HIRE

**PROMPT
RELIABLE
EFFICIENT**

MACaulay 2233

W. G. YOUNGMAN LIMITED, WANDSWORTH WORKS, Wandsworth Road, London S.W.8



THE JOY-SULLIVAN DEMONSTRATION UNIT

Soon to begin another tour of industrial centres, mines, quarries and construction sites throughout the United Kingdom, this mobile demonstration unit is out and about to prove the superiority of Joy-Sullivan air power equipment to engineers-on-the-job. This is your chance to see for yourself what Joy tools can do—on your own site and in comparison with your existing plant.

Use this coupon or write today and we will swiftly make arrangements convenient to you.

AIR POWER
JOY-SULLIVAN LTD
DIVISION





The demonstration unit consists of a Joy Airvane rotary portable compressor operating Speedline concrete breakers and rock drills PLUS the sensational JAL-47 air-leg drill which arouses comment everywhere with its unsurpassed performance and low air consumption. All demonstration machines are absolutely standard production—to give an honest-to-goodness proof of the performance you can expect with Joy-Sullivan equipment.

IT IS COMING YOUR WAY



To Demonstration Unit, Joy-Sullivan Ltd., Air Power Division, 7 Harley Street, London, W.I.

Please get in touch with me to arrange a demonstration of your equipment at _____ (Name of site)

My name is _____

Position _____

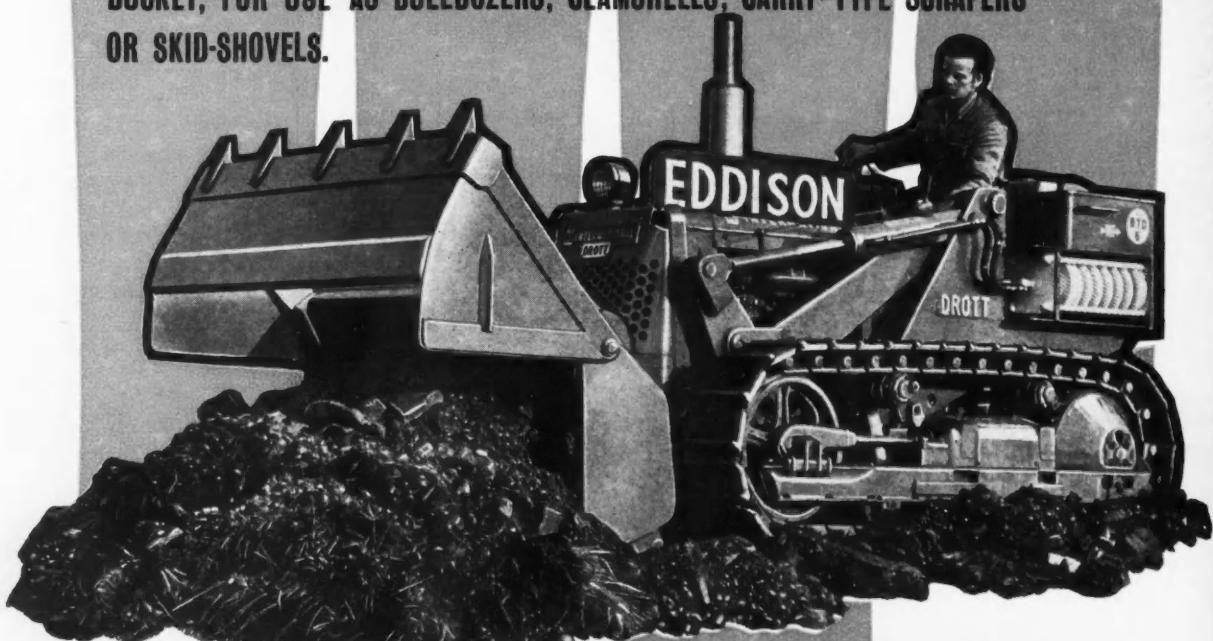
Company _____

Address _____

(It is understood that a demonstration incurs no obligation on our part.)

HIRE TRACTOR SHOVELS

FROM THE LARGEST FLEET OF INTERNATIONAL BTD 6 DROTT SKID-SHOVELS IN THE COUNTRY, INCLUDING MACHINES FITTED WITH THE EXCLUSIVE 4-IN-1 BUCKET, FOR USE AS BULLDOZERS, GLAMSHIELDS, CARRY-TYPE SCRAPERS OR SKID-SHOVELS.



ALSO: ROAD ROLLERS, VIBRATING ROLLERS, COMPRESSORS, EXCAVATORS, CRAWLER TRACTORS, CRANES & CONTRACTORS' PLANT.

EDDISON PLANT LTD
BELTON, GRANTHAM TELEPHONE: GRANTHAM 1221/3

DEPOTS

BIRMINGHAM Tel: Shirley Birmingham 3522

BRECON Tel: Brecon 330

CARDIFF Tel: Cardiff 71354

CARDINGTON Tel: Cardington 206

DARLINGTON Tel: Darlington 3258

DISS, NORFOLK Tel: Diss 2688

DORCHESTER Tel: Dorchester 57

EDINBURGH Tel: Liberton 74507

GLASGOW Tel: Stepps 628

KINGSTEIGNTON Tel: Newton Abbot 1181

KINGSTON-ON-THAMES Tel: Kingston 7016

MANCHESTER Tel: Ramsbottom 3516



EP 24

PLANT AND MACHINERY WANTED—FOR SALE—FOR HIRE

FOR SALE.

Smith Super 10, Crane-rigged, Serial 18828, November, 1955, little used, almost as new, £1,500.
 DINKY DIGGER, an Fordson Major Diesel Tractor, with Skyline Shovel, overhauled, £650.
 Allen TRENCHER, 12/18in. Dorman, D4 Engine, Serial 73580, ready for immediate work. To clear, £350.
 Nuffield Universal TRACTOR with Hydraulic Shovel and Dozer Blade, Diesel, ready for work, £325.
 Muirhill Petrol, 2yd. DUMP TRUCKS, £30 each.
 Aveling Parrot, 1yd. DUMP TRUCKS, £30 each.
 Builders' Mighty HOISTS, Swtl., as new, £25 each.
 Coventry Climax WATER PUMPS, ex Government, £75 each.
 Bray Hydraulic, 1yd. SHOVEL, an County Crawler Diesel Tractor, 1955, £400, £250.
 Exchanges, Hire Purchase.

FIELDS, Forest Edge, Ringwood Road, Ferndown, Dorset. Phone: Ferndown 837.

CONCRETE MIXERS FOR SALE OR HIRE.
 5/3½, Benford Diesel-driven, on four steel wheels.
 5/3½, Benford High-speed Trailer Model.
 5/3½, Winget Petrol and Diesel-driven, on two and four steel wheels.
 5/3½, Stothert and Pitt Petrol- and Diesel-driven, on four steel wheels.
 5/3½, Minimixers Petrol- and Diesel-driven, on four steel wheels.
 5/3½, Ransomes Rapier Petrol- and Diesel-driven, on four steel wheels.
 7/5, Stothert and Pitt Diesel-driven.
 10/7, Winget Ransomes Rapier, Rex, Parker and Stothert and Pitt, on four steel wheels. Tilting and Closed Drum, Petrol, Diesel, Electric, or Electric, some with Built-in Weighers.

W. V. DAVIES, Concrete Mixer Service, Shipton-on-Stour. Phone: 125.

FOR SALE.

Fiat 55, fitted with Machave Angledozer and Logging Winch, in excellent condition.
 Cletrac BDH, fitted with Cable-operated Angledozer, P.C.U., in very good condition.
 Ransomes 3-ton, 12ft. 6in. TRENCHER.
 Ransomes 5-ton, Hextrac PLough.
 BEN BURGESS TRACTORS LTD., 43 King Street, Norwich, NOR.04B. Tel. 28251/2.

FOR SALE, a rather fine 24RB FORWARD SHOVEL, with completed Dragline Conversion, thoroughly overhauled and in first-class condition, available in about two weeks.

PLANT SALES, LTD.

25 Castlereagh Street, London, W.1. PAD. 2663/5.

WANTED, TOWER CRANE, height 50-60ft, under hook, rail-mounted or fixed internally for 1½ tons at 40ft., 1 ton at 45ft. Required to HIRE 10 weeks, from April next onwards.—Offers to Box P.1224, "The Contract Journal."

COLES MOBILE CRANE, fully slewing, 3½-ton, on Leyland chassis, all in perfect order, fully insured, taxed, £1,000. — HAMOND, Point Road, Canvey Island, Essex.

WANTED, Circular Crane TIPPING SKIPS, all sizes. Must be in good condition.—CAMBRIAN PLANT CO., LTD., Tetbury, Glos.

BIG CRANE EXCAVATORS

Several for Sale

A.R.C. MOTOR Co. Ltd.
 REDHILL WORKS, ARNOLD, NOTTINGHAM

Telephone: 26-3331/5

FOR SALE OR HIRE

Compressors 2 to 12 Tools.
 Vibrating Rollers, Crane Skips.
 Platform Hoists, Scaffold Jib Cranes.
 Concrete Mixers, 4/3 to 14/10 cu. ft.
 Diesel Driven Pumps.
 Diesel Welding Plants.

JOSEPH THOMPSON & Co.
 (Liverpool) Ltd.

Dutton Street, Liverpool, 3.
 Central 0820 & 3023

FOR IMMEDIATE HIRE.

Caterpillar D4, D6, D7 and D8 TRACTORS, with Dozers and Scrapers.
 10RB, 19RB and 22RB EXCAVATORS, with usual equipment.
 5-ton, 10-ton, 15-ton and 20-ton CRANES.
 3/4 cu. yd. EXCAVATORS, rigged as Cranes. Jibs 35ft./70ft., power boom lowering.
 Caterpillar TRAXCAVATORS, with 1½ cu. yd. Shovels, Rippers and Dozer Blade.
 Allis-Chalmers HD5G TRACTO-SHOVELS, 1 cu. yd. capacity. International Drott TRACTO-SHOVELS, with 4-in-1 equipments.
 J.C.E. HYDRA-DIGGERS, with 18in.-24in. Buckets, Large Shovels and Square Hole Attachment.

5/3½, 7/5, 10/7 and 14/10 CONCRETE MIXERS, Petrol or Diesel.

10-ton, 15-ton and 20-ton PORTASILOS.

1½, 2, 3½, 4, 5½, 7½, 10½ cu. yd. BENFORD DUMPERS.

20/30cwt. VIBRATORY ROLLERS.

20/30cwt. FOOTPATH ROLLERS.

5/10cwt. ACE HOISTS, 60ft. Masts.

CHINOOK HEATERS, Petrol and Electric.

2-Tool PORTABLE COMPRESSORS.

Please call or write to: A. J. PHILLIPS LTD.

3in. Diaphragm PUMP, Diesel- or Petrol-driven.

Write Box P.1245, "The Contract Journal."

WANTED.

The following Plant is required, in any condition. Those replying to this advertisement should state the year and condition and price required, and where available for inspection.

HANDLER, 3-ton, 4-ton, 6-ton, 8-ton, 10-ton, 12-ton, 14-ton, 16-ton, 18-ton, 20-ton, 22-ton, 24-ton, 26-ton, 28-ton, 30-ton, 32-ton, 34-ton, 36-ton, 38-ton, 40-ton, 42-ton, 44-ton, 46-ton, 48-ton, 50-ton, 52-ton, 54-ton, 56-ton, 58-ton, 60-ton, 62-ton, 64-ton, 66-ton, 68-ton, 70-ton, 72-ton, 74-ton, 76-ton, 78-ton, 80-ton, 82-ton, 84-ton, 86-ton, 88-ton, 90-ton, 92-ton, 94-ton, 96-ton, 98-ton, 100-ton, 102-ton, 104-ton, 106-ton, 108-ton, 110-ton, 112-ton, 114-ton, 116-ton, 118-ton, 120-ton, 122-ton, 124-ton, 126-ton, 128-ton, 130-ton, 132-ton, 134-ton, 136-ton, 138-ton, 140-ton, 142-ton, 144-ton, 146-ton, 148-ton, 150-ton, 152-ton, 154-ton, 156-ton, 158-ton, 160-ton, 162-ton, 164-ton, 166-ton, 168-ton, 170-ton, 172-ton, 174-ton, 176-ton, 178-ton, 180-ton, 182-ton, 184-ton, 186-ton, 188-ton, 190-ton, 192-ton, 194-ton, 196-ton, 198-ton, 200-ton, 202-ton, 204-ton, 206-ton, 208-ton, 210-ton, 212-ton, 214-ton, 216-ton, 218-ton, 220-ton, 222-ton, 224-ton, 226-ton, 228-ton, 230-ton, 232-ton, 234-ton, 236-ton, 238-ton, 240-ton, 242-ton, 244-ton, 246-ton, 248-ton, 250-ton, 252-ton, 254-ton, 256-ton, 258-ton, 260-ton, 262-ton, 264-ton, 266-ton, 268-ton, 270-ton, 272-ton, 274-ton, 276-ton, 278-ton, 280-ton, 282-ton, 284-ton, 286-ton, 288-ton, 290-ton, 292-ton, 294-ton, 296-ton, 298-ton, 300-ton, 302-ton, 304-ton, 306-ton, 308-ton, 310-ton, 312-ton, 314-ton, 316-ton, 318-ton, 320-ton, 322-ton, 324-ton, 326-ton, 328-ton, 330-ton, 332-ton, 334-ton, 336-ton, 338-ton, 340-ton, 342-ton, 344-ton, 346-ton, 348-ton, 350-ton, 352-ton, 354-ton, 356-ton, 358-ton, 360-ton, 362-ton, 364-ton, 366-ton, 368-ton, 370-ton, 372-ton, 374-ton, 376-ton, 378-ton, 380-ton, 382-ton, 384-ton, 386-ton, 388-ton, 390-ton, 392-ton, 394-ton, 396-ton, 398-ton, 400-ton, 402-ton, 404-ton, 406-ton, 408-ton, 410-ton, 412-ton, 414-ton, 416-ton, 418-ton, 420-ton, 422-ton, 424-ton, 426-ton, 428-ton, 430-ton, 432-ton, 434-ton, 436-ton, 438-ton, 440-ton, 442-ton, 444-ton, 446-ton, 448-ton, 450-ton, 452-ton, 454-ton, 456-ton, 458-ton, 460-ton, 462-ton, 464-ton, 466-ton, 468-ton, 470-ton, 472-ton, 474-ton, 476-ton, 478-ton, 480-ton, 482-ton, 484-ton, 486-ton, 488-ton, 490-ton, 492-ton, 494-ton, 496-ton, 498-ton, 500-ton, 502-ton, 504-ton, 506-ton, 508-ton, 510-ton, 512-ton, 514-ton, 516-ton, 518-ton, 520-ton, 522-ton, 524-ton, 526-ton, 528-ton, 530-ton, 532-ton, 534-ton, 536-ton, 538-ton, 540-ton, 542-ton, 544-ton, 546-ton, 548-ton, 550-ton, 552-ton, 554-ton, 556-ton, 558-ton, 560-ton, 562-ton, 564-ton, 566-ton, 568-ton, 570-ton, 572-ton, 574-ton, 576-ton, 578-ton, 580-ton, 582-ton, 584-ton, 586-ton, 588-ton, 590-ton, 592-ton, 594-ton, 596-ton, 598-ton, 600-ton, 602-ton, 604-ton, 606-ton, 608-ton, 610-ton, 612-ton, 614-ton, 616-ton, 618-ton, 620-ton, 622-ton, 624-ton, 626-ton, 628-ton, 630-ton, 632-ton, 634-ton, 636-ton, 638-ton, 640-ton, 642-ton, 644-ton, 646-ton, 648-ton, 650-ton, 652-ton, 654-ton, 656-ton, 658-ton, 660-ton, 662-ton, 664-ton, 666-ton, 668-ton, 670-ton, 672-ton, 674-ton, 676-ton, 678-ton, 680-ton, 682-ton, 684-ton, 686-ton, 688-ton, 690-ton, 692-ton, 694-ton, 696-ton, 698-ton, 700-ton, 702-ton, 704-ton, 706-ton, 708-ton, 710-ton, 712-ton, 714-ton, 716-ton, 718-ton, 720-ton, 722-ton, 724-ton, 726-ton, 728-ton, 730-ton, 732-ton, 734-ton, 736-ton, 738-ton, 740-ton, 742-ton, 744-ton, 746-ton, 748-ton, 750-ton, 752-ton, 754-ton, 756-ton, 758-ton, 760-ton, 762-ton, 764-ton, 766-ton, 768-ton, 770-ton, 772-ton, 774-ton, 776-ton, 778-ton, 780-ton, 782-ton, 784-ton, 786-ton, 788-ton, 790-ton, 792-ton, 794-ton, 796-ton, 798-ton, 800-ton, 802-ton, 804-ton, 806-ton, 808-ton, 810-ton, 812-ton, 814-ton, 816-ton, 818-ton, 820-ton, 822-ton, 824-ton, 826-ton, 828-ton, 830-ton, 832-ton, 834-ton, 836-ton, 838-ton, 840-ton, 842-ton, 844-ton, 846-ton, 848-ton, 850-ton, 852-ton, 854-ton, 856-ton, 858-ton, 860-ton, 862-ton, 864-ton, 866-ton, 868-ton, 870-ton, 872-ton, 874-ton, 876-ton, 878-ton, 880-ton, 882-ton, 884-ton, 886-ton, 888-ton, 890-ton, 892-ton, 894-ton, 896-ton, 898-ton, 900-ton, 902-ton, 904-ton, 906-ton, 908-ton, 910-ton, 912-ton, 914-ton, 916-ton, 918-ton, 920-ton, 922-ton, 924-ton, 926-ton, 928-ton, 930-ton, 932-ton, 934-ton, 936-ton, 938-ton, 940-ton, 942-ton, 944-ton, 946-ton, 948-ton, 950-ton, 952-ton, 954-ton, 956-ton, 958-ton, 960-ton, 962-ton, 964-ton, 966-ton, 968-ton, 970-ton, 972-ton, 974-ton, 976-ton, 978-ton, 980-ton, 982-ton, 984-ton, 986-ton, 988-ton, 990-ton, 992-ton, 994-ton, 996-ton, 998-ton, 100-ton, 102-ton, 104-ton, 106-ton, 108-ton, 110-ton, 112-ton, 114-ton, 116-ton, 118-ton, 120-ton, 122-ton, 124-ton, 126-ton, 128-ton, 130-ton, 132-ton, 134-ton, 136-ton, 138-ton, 140-ton, 142-ton, 144-ton, 146-ton, 148-ton, 150-ton, 152-ton, 154-ton, 156-ton, 158-ton, 160-ton, 162-ton, 164-ton, 166-ton, 168-ton, 170-ton, 172-ton, 174-ton, 176-ton, 178-ton, 180-ton, 182-ton, 184-ton, 186-ton, 188-ton, 190-ton, 192-ton, 194-ton, 196-ton, 198-ton, 200-ton, 202-ton, 204-ton, 206-ton, 208-ton, 210-ton, 212-ton, 214-ton, 216-ton, 218-ton, 220-ton, 222-ton, 224-ton, 226-ton, 228-ton, 230-ton, 232-ton, 234-ton, 236-ton, 238-ton, 240-ton, 242-ton, 244-ton, 246-ton, 248-ton, 250-ton, 252-ton, 254-ton, 256-ton, 258-ton, 260-ton, 262-ton, 264-ton, 266-ton, 268-ton, 270-ton, 272-ton, 274-ton, 276-ton, 278-ton, 280-ton, 282-ton, 284-ton, 286-ton, 288-ton, 290-ton, 292-ton, 294-ton, 296-ton, 298-ton, 300-ton, 302-ton, 304-ton, 306-ton, 308-ton, 310-ton, 312-ton, 314-ton, 316-ton, 318-ton, 320-ton, 322-ton, 324-ton, 326-ton, 328-ton, 330-ton, 332-ton, 334-ton, 336-ton, 338-ton, 340-ton, 342-ton, 344-ton, 346-ton, 348-ton, 350-ton, 352-ton, 354-ton, 356-ton, 358-ton, 360-ton, 362-ton, 364-ton, 366-ton, 368-ton, 370-ton, 372-ton, 374-ton, 376-ton, 378-ton, 380-ton, 382-ton, 384-ton, 386-ton, 388-ton, 390-ton, 392-ton, 394-ton, 396-ton, 398-ton, 400-ton, 402-ton, 404-ton, 406-ton, 408-ton, 410-ton, 412-ton, 414-ton, 416-ton, 418-ton, 420-ton, 422-ton, 424-ton, 426-ton, 428-ton, 430-ton, 432-ton, 434-ton, 436-ton, 438-ton, 440-ton, 442-ton, 444-ton, 446-ton, 448-ton, 450-ton, 452-ton, 454-ton, 456-ton, 458-ton, 460-ton, 462-ton, 464-ton, 466-ton, 468-ton, 470-ton, 472-ton, 474-ton, 476-ton, 478-ton, 480-ton, 482-ton, 484-ton, 486-ton, 488-ton, 490-ton, 492-ton, 494-ton, 496-ton, 498-ton, 500-ton, 502-ton, 504-ton, 506-ton, 508-ton, 510-ton, 512-ton, 514-ton, 516-ton, 518-ton, 520-ton, 522-ton, 524-ton, 526-ton, 528-ton, 530-ton, 532-ton, 534-ton, 536-ton, 538-ton, 540-ton, 542-ton, 544-ton, 546-ton, 548-ton, 550-ton, 552-ton, 554-ton, 556-ton, 558-ton, 560-ton, 562-ton, 564-ton, 566-ton, 568-ton, 570-ton, 572-ton, 574-ton, 576-ton, 578-ton, 580-ton, 582-ton, 584-ton, 586-ton, 588-ton, 590-ton, 592-ton, 594-ton, 596-ton, 598-ton, 600-ton, 602-ton, 604-ton, 606-ton, 608-ton, 610-ton, 612-ton, 614-ton, 616-ton, 618-ton, 620-ton, 622-ton, 624-ton, 626-ton, 628-ton, 630-ton, 632-ton, 634-ton, 636-ton, 638-ton, 640-ton, 642-ton, 644-ton, 646-ton, 648-ton, 650-ton, 652-ton, 654-ton, 656-ton, 658-ton, 660-ton, 662-ton, 664-ton, 666-ton, 668-ton, 670-ton, 672-ton, 674-ton, 676-ton, 678-ton, 680-ton, 682-ton, 684-ton, 686-ton, 688-ton, 690-ton, 692-ton, 694-ton, 696-ton, 698-ton, 700-ton, 702-ton, 704-ton, 706-ton, 708-ton, 710-ton, 712-ton, 714-ton, 716-ton, 718-ton, 720-ton, 722-ton, 724-ton, 726-ton, 728-ton, 730-ton, 732-ton, 734-ton, 736-ton, 738-ton, 740-ton, 742-ton, 744-ton, 746-ton, 748-ton, 750-ton, 752-ton, 754-ton, 756-ton, 758-ton, 760-ton, 762-ton, 764-ton, 766-ton, 768-ton, 770-ton, 772-ton, 774-ton, 776-ton, 778-ton, 780-ton, 782-ton, 784-ton, 786-ton, 788-ton, 790-ton, 792-ton, 794-ton, 796-ton, 798-ton, 800-ton, 802-ton, 804-ton, 806-ton, 808-ton, 810-ton, 812-ton, 814-ton, 816-ton, 818-ton, 820-ton, 822-ton, 824-ton, 826-ton, 828-ton, 830-ton, 832-ton, 834-ton, 836-ton, 838-ton, 840-ton, 842-ton, 844-ton, 846-ton, 848-ton, 850-ton, 852-ton, 854-ton, 856-ton, 858-ton, 860-ton, 862-ton, 864-ton, 866-ton, 868-ton, 870-ton, 872-ton, 874-ton, 876-ton, 878-ton, 880-ton, 882-ton, 884-ton, 886-ton, 888-ton, 890-ton, 892-ton, 894-ton, 896-ton, 898-ton, 900-ton, 902-ton, 904-ton, 906-ton, 908-ton, 910-ton, 912-ton, 914-ton, 916-ton, 918-ton, 920-ton, 922-ton, 924-ton, 926-ton, 928-ton, 930-ton, 932-ton, 934-ton, 936-ton, 938-ton, 940-ton, 942-ton, 944-ton, 946-ton, 948-ton, 950-ton, 952-ton, 954-ton, 956-ton, 958-ton, 960-ton, 962-ton, 964-ton, 966-ton, 968-ton, 970-ton, 972-ton, 974-ton, 976-ton, 978-ton, 980-ton, 982-ton, 984-ton, 986-ton, 988-ton, 990-ton, 992-ton, 994-ton, 996-ton, 998-ton, 100-ton, 102-ton, 104-ton, 106-ton, 108-ton, 110-ton, 112-ton, 114-ton, 116-ton, 118-ton, 120-ton, 122-ton, 124-ton, 126-ton, 128-ton, 130-ton, 132-ton, 134-ton, 136-ton, 138-ton, 140-ton, 142-ton, 144-ton, 146-ton, 148-ton, 150-ton, 152-ton, 154-ton, 156-ton, 158-ton, 160-ton, 162-ton, 164-ton, 166-ton, 168-ton, 170-ton, 172-ton, 174-ton, 176-ton, 178-ton, 180-ton, 182-ton, 184-ton, 186-ton, 188-ton, 190-ton, 192-ton, 194-ton, 196-ton, 198-ton, 200-ton, 202-ton, 204-ton, 206-ton, 208-ton, 210-ton, 212-ton, 214-ton, 216-ton, 218-ton, 220-ton, 222-ton, 224-ton, 226-ton, 228-ton, 230-ton, 232-ton, 234-ton, 236-ton, 238-ton, 240-ton, 242-ton, 244-ton, 246-ton, 248-ton, 250-ton, 252-ton, 254-ton, 256-ton, 258-ton, 260-ton, 262-ton, 264-ton, 266-ton, 268-ton, 270-ton, 272-ton, 274-ton, 276-ton, 278-ton, 280-ton, 282-ton, 284-ton, 286-ton, 288-ton, 290-ton, 292-ton, 294-ton, 296-ton, 298-ton, 300-ton, 302-ton, 304-ton, 306-ton, 308-ton, 310-ton, 312-ton, 314-ton, 316-ton, 318-ton, 320-ton, 322-ton, 324-ton, 326-ton, 328-ton, 330-ton, 332-ton, 334-ton, 336-ton, 338-ton, 340-ton, 342-ton, 344-ton, 346-ton, 348-ton, 350-ton, 352-ton, 354-ton, 356-ton, 358-ton, 360-ton, 362-ton, 364-ton, 366-ton, 368-ton, 370-ton, 372-ton, 374-ton, 376-ton, 378-ton, 380-ton, 382-ton, 384-ton, 386-ton, 388-ton, 390-ton, 392-ton, 394-ton, 396-ton, 398-ton, 400-ton, 402-ton, 404-ton, 406-ton, 408-ton, 410-ton, 412-ton, 414-ton, 416-ton, 418-ton, 420-ton, 422-ton, 424-ton, 426-ton, 428-ton, 430-ton, 432-ton, 434-ton, 436-ton, 438-ton, 440-ton, 442-ton, 444-ton, 446-ton, 448-ton, 450-ton, 452-ton, 454-ton, 456-ton, 458-ton, 460-ton, 462-ton, 464-ton, 466-ton, 468-ton, 470-ton, 472-ton, 474-ton, 476-ton, 478-ton, 480-ton, 482-ton, 484-ton, 486-ton, 488-ton, 490-ton, 492-ton, 494-ton, 496-ton, 498-ton, 500-ton, 502-ton, 504-ton, 506-ton, 508-ton, 510-ton, 512-ton, 514-ton, 516-ton, 518-ton, 520-ton, 522-ton, 524-ton, 526-ton, 528-ton, 530-ton, 532-ton, 534-ton, 536-ton, 538-ton, 540-ton, 542-ton, 544-ton, 546-ton, 548-ton, 550-ton, 552-ton, 554-ton, 556-ton, 558-ton, 560-ton, 562-ton, 564-ton, 566-ton, 568-ton, 570-ton, 572-ton, 574-ton, 576-ton, 578-ton, 580-ton, 582-ton, 584-ton, 586-ton, 588-ton, 590-ton, 592-ton, 594-ton, 596-ton, 598-ton, 600-ton, 602-ton, 604-ton, 606-ton, 608-ton, 610-ton, 612-ton, 614-ton, 616-ton, 618-ton, 620-ton, 622-ton, 624-ton, 626-ton, 628-ton, 630-ton, 632-ton, 634-ton, 636-ton, 638-ton, 640-ton, 642-ton, 644-ton, 646-ton, 648-ton, 650-ton, 652-ton, 654-ton, 656-ton, 658-ton, 660-ton, 662-ton, 664-ton, 666-ton, 668-ton, 670-ton, 672-ton, 674-ton, 676-ton, 678-ton, 680-ton, 682-ton, 684-ton, 686-ton, 688-ton, 690-ton, 692-ton, 694-ton, 696-ton, 698-ton, 700-ton, 702-ton, 704-ton, 706-ton, 708-ton, 710-ton, 712-ton, 714-ton, 716-ton, 718-ton, 720-ton, 722-ton, 724-ton, 726-ton, 728-ton, 730-ton, 732-ton, 734-ton, 736-ton, 738-ton, 740-ton, 742-ton, 744-ton, 746-ton, 748-ton, 750-ton, 752-ton, 754-ton, 756-ton, 758-ton, 760-ton, 762-ton, 764-ton, 766-ton, 768-ton, 770-ton, 772-ton, 774-ton, 776-ton, 778-ton, 780-ton, 782-ton, 784-ton, 786-ton, 788-ton, 790-ton, 792-ton, 794-ton, 796-ton, 798-ton, 800-ton, 802-ton, 804-ton, 806-ton, 808-ton, 810-ton, 812-ton, 814-ton, 816-ton, 818-ton, 820-ton, 822-ton, 824-ton, 826-ton, 828-ton, 830-ton, 832-ton, 834-ton, 836-ton, 838-ton, 840-ton, 842-ton, 844-ton, 846-ton, 848-ton, 850-ton, 852-ton, 854-ton, 856-ton, 858-ton, 860-ton, 862-ton, 864-ton, 866-ton, 868-ton, 870-ton, 872-ton, 874-ton, 876-ton, 878-ton, 880-ton, 882-ton, 884-ton, 886-ton, 888-ton, 890-ton, 892-ton, 894-ton, 896-ton, 898-ton, 900-ton, 902-ton, 904-ton, 906-ton, 908-ton, 910-ton, 912-ton, 914-ton, 916-ton, 918-ton, 920-ton, 922-ton, 924-ton, 926-ton, 928-ton, 930-ton, 932-ton, 934-ton, 936-ton, 938-ton, 940-ton, 942-ton, 944-ton, 946-ton, 948-ton, 950-ton, 952-ton, 954-ton, 956-ton, 958-ton, 960-ton, 962-ton, 964-ton, 966-ton, 968-ton, 970-ton, 972-ton, 974-ton, 976-ton, 978-ton, 980-ton, 982-ton, 984-ton, 986-ton, 988-ton, 990-ton, 992-ton, 994-ton, 996-ton, 998-ton, 100-ton, 102-ton, 104-ton, 106-ton, 108-ton, 110-ton, 112-ton, 114-ton, 116-ton, 118-ton, 120-ton, 122-ton, 124-ton, 126-ton, 128-ton, 130-ton, 132-ton, 134-ton, 136-ton, 138-ton, 140-ton, 142-ton, 144-ton, 146-ton, 148-ton, 150-ton, 152-ton, 154-ton, 156-ton, 158-ton, 160-ton, 162-ton, 164-ton, 16

PLANT AND MACHINERY WANTED—FOR SALE—FOR HIRE

VALES PLANT REGISTER, LTD.
OFFER FOR IMMEDIATE SALE:

NEALS NM 2-ton MOBILES, 35ft. Lattice, Ruston Engine, pneumatics, 1951/2, £1,100/£1,250 ea.
JONES K4A MOBILES, 24/30ft. Jibs, Ruston Engines, 1951/4, £2,200 each.
COLES 6-ton MOBILE, 40ft. Jib, 1954, pneumatics, Diesel, £2,950.
BOOTH 5-ton Steam SHUNTING LOCO., 4ft. 8½in. gauge, 35ft. Jib, 1951. Completely overhauled, £1,150.
BUTTERS 5-ton 2-motor Electric DERRICK, 120ft. Jib, No. 5555, £2,250.
ANDERSON 5-ton Steam Shunting DERRICK, 90ft. Jib, new 1947. In good condition, £1,100.
MORGAN 10-ton 3-motor Electric DERRICK, 120ft. Power, Boxes, £6,000.
MORGAN 10-ton 2-motor Electric DERRICK, 120ft. Jib, 1954. Boxes, £4,950.
RUSHWORTH 2-motor 10-ton Electric DERRICK, 70ft. Jib, new 1957. Very good condition, £3,850.
MORGAN 15-ton Steam DERRICK, 120ft. Jib, new 1956. Boxes, £8,750.
BUTTERS 15-ton 2-motor Electric DERRICK, 120ft. Jib, 1955. Price on application.
COLES R2310 20-ton Diesel ELECTRIC RAIL, 30ft. Diesel, with cab, S.L.I., air pressure, brakes, 4ft. 8½in. gauge, with magnet. Perkins Engine, new 1956. Excellent condition, £8,750.

FOR A COMPREHENSIVE LIST OF PLANT FOR SALE AND HIRE—SEND FOR VALES FREE PLANT REGISTER.

Further details: 14 Lower Grosvenor Place, London, S.W.1. Victoria 7531, 3501, 8080, 9886 (15 lines).

SOUTHERN BUILDERS AND CONTRACTORS (LONDON) LTD.

HIRE:

All Contractors' Plant at very competitive rates.

Two R.R. Model 440, 1952, with Dragline and F/S. Very reasonable price for good machines; would separate.

3-ton Diesel MOBILE CRANE, on Rubbers.

Write or phone: "Cranleigh," The Drive, Rickmansworth 2878 or 5235.

TOKEN FOR PLANT HIRE your EXCAVATORS, DOZERS and SCRAPPERS, DOKUMAX Major DIGGERS and Digg TRENCHERS, DUMPERS, ROLLERS, CONCRETE MIXERS, PUMPS, COMPRESSORS, RAMMERS, VIBRATORS, HOISTS, GENERATORS, etc. from TOKEN CONSTRUCTION CO., LTD.

Station Rd., Thatcham, Berks. Tel.: THA. 3243-3370.

Valmer Rd., Camberwell, S.E.5. Tel.: Brixton 3103.

WANTED:

Benford 25 Regulus MIXERS.

Allis-Chalmers HDGS CHAINS, SPROCKETS and SPARES.

Portable SCREENING PLANT.

Write Box P.1234, "The Contract Journal."

FOR SALE or HIRE: Six 14B Muir-Hill 4½yd. DUMPERS, rock bodies with Perkins P6 Engines. Well tired, modern and good.—PLANT SALES LTD., 25 Castlethorpe Street, London, W.1. Phone: PADDINGTON 2663/5.

REQUIRED urgently, One Caterpillar Motorised GRADER. Diesel, Model 12, Series 9K, or later. Send full particulars and price required to EARTH-STRIP, Wakefield Road, Hamble, near Doncaster. Tel.: Adwick-le-Street 3166.

WANTED: ROAD ROLLER, Aveling-Barford or Marshall, 8-ton, Diesel, with Scarifiers.—Full particulars and price to MESSRS. C. JENNER AND SON, LTD., 5, 7 and 9 Bouverie Road East, Folkestone, Kent.

WHEN BUYING PLANT, consult experts with life-time experience. We will travel, examine and report condition and value of any earthmoving equipment or quarry plant.—I. S. NATHAN, 1 Western Street, Lower Wortley, Leeds, 12. Tel. 630141.

WANTED: Good Second-hand FORK LIFT TRUCK, Diesel, pneumatic tyres, 5,000lb. lift.—Apply to THOMAS MOSEDALE AND SONS LTD., Carrington Road BRICKWORKS, Flitton, near Manchester.

WANTED to PURCHASE or HIRE for road contract, three CATERPILLAR DW212s. Essex area.—Write Box P.1150, "The Contract Journal."

FOR HIRE

SIDEBOOM TRACTORS:

TRACTORS: HD7, HD10, HD14, Dozer or Scrapers. D4, D6, D8, Dozer or Scrapers.

TRACTO-SHOVELS: HD5G, with 1½ cu. yd. Bucket. HD5G, with 2½ cu. yd. Bucket.

EXCAVATORS: 19RB, all equipments. J.C.B. Hydra-Digga, all equipments.

DUMPERS: Aveling, 4½ cu. yd. Rob Roy, 15cwt.

ROLLERS: 5-ton and 8-ton, Diesel.

CRANES: 5-ton and 10-ton, lorry-mounted, 30-60ft. Jibs.

PUMPS: 3in. L. and F. Diaphragm. 3in. Centrifugal.

MIXERS: 5/3½, 7/5, 10/7, 14/10.

TIPPING LORRIES: Austin 6 x 4.

All inquiries to:

G. CARTER & SONS, LTD.
YOKESFORD HILL, ROMSEY, HANTS.
Telephone: Braishfield 395/6/7.

FOR SALE:

2-ton Neals NM MOBILE CRANE, 35ft. Jib, pneumatic tyres, Ruston Diesel, 1951/2 machine. Excellent condition, £1,275.

Pegson RAMMERS. Recent overhaul, £4,500. Simple PUMP, excellent condition, with hoses, 2in. £50.

2in. R. and R. CENTRIFUGAL PUMP, steel wheels. Completely overhauled, £50.

A.C.E. 20/30cwt. HOIST, 15-h.p. Electric Motor, complete with track, etc., £120.

A.C.E. 1/2cwt. HOIST, Petrol Engine, with track etc., £75.

Wild BUILDERS' ELEVATOR, Petrol Engine, £80.

3½/5-ton Ransomes and Rapier MOBILE CRANE, standard type, Diesel Engine, with cab, £650.

Ajax B Type CRUSHER, complete with Spares, £1,250.

Wingate 10/10 C.G.10 Standard MIXER, Diesel. Very good condition, £200.

3in. Wickham Lift and Force PUMP, Diesel, £125.

VIBRATING ROLLERS, LORRY-MOUNTED CRANES, PORTABLE and MOBILE COMPRESSORS, RAMMERS, TRACTOR SHOVELS, DURS, DURB and 22RB EXCAVATORS, DUMPERS.

THE HERCULES PLANT HIRE CO., LTD., 45 Hornsey Road, London, N.7. Tel.: North 7074.

PLANT FOR SALE:

The Wickham 13 cu. ft. Diesel DUMPERS.

1955 Vickers Model C TRACTOR, with P.C.U.

10RB EXCAVATOR, 15500 Series, with Backhoe.

Priestman Cub Mk. V, IV and III EXCAVATORS.

Caterpillar D4, with L.P.C. Angledozer.

Caterpillar D6, Model 48, with Hydraulic Angledozer.

Caterpillar D6, Model 48, with Diesel and Dozer.

International TD5, TD14 and TD18, with equipments.

For further details, apply:

ROBERTSON, Barkway (Tel. 2777), Herts.

EX STOCK NOW:

1955 Jumbo Hydraulic 3-ton CRANE with 1½yd. Hydraulic Grab, Ram Galters, Swan-neck Jib, excellent order, £1,250.

1951 Jumbo Hydraulic 3-ton CRANE with 1½yd. Hydraulic Grab, very good, £950.

WILLIAM R. SELWOOD LTD., Chandler's Ford, Hants. Phone 2275.

WANTED:

Prismman Cub IV DRAGLINE EQUIPMENT and Side TDS.

Low-loading Articulated TRAILER, with or without tractor unit.

Caterpillar D4, Model 6U, with Blade.

Write Box P.1237, "The Contract Journal."

FOR SALE, Two Ruston 10RB EXCAVATORS, 14000/16000 Series, with Skinner, Trencher and Dragline Equipments. Four Broomwade SV1 and two SV2 Listel Diesel Engine COMPRESSORS, full portable equipment, with pneumatic tyres. All in good condition.—Box P.1216, "The Contract Journal."

ONE 10RB EXCAVATOR, Serial No. 15822, fitted with SVRH Ruston Engine c.w. Skinner and Backhoe Equipments, price £1,600.—Apply C. FIRBANK (ENGINEERS), LTD., 276a Dallow Road, Luton, Bedfordshire.

TWO 10RB EXCAVATORS, 10000 Series, Three-cylinder Engines, Dragline Equipments, £1,650 each.—HOLLINGS AND ANDREWS, East Buxton Lane, Otley, Yorks. Telephone 2940.

WANTED: CATERPILLAR TRACTORS, TRACCAVATORS and EQUIPMENTS: not more than five years old.—Phone Rothwell 3258, or write JAW BONE WORKS, Wood Lane, Rothwell, Yorks.

SALE or HIRE: 85-h.p. standard gauge Diesel LOCOMOTIVE, weight 16 tons, by Motor Rail.

JOSEPH PUGSYL AND SONS LTD., Bristol, S. Telephone: Bristol 56037.

FOR SALE, 10RB, Skinner and Backhoe; Smith 210, with F/S, Skinner and Backhoe; also RR462, 70ft. Dragline.—B.G. PLANT (SALES AGENCY), LTD., Watlington, Oxon. Watlington 44.

TEALS 10-ton CRANE, 20ft. Straight Channel Jib, Ruston Engine, reconditioned and guaranteed, £1,300.—NEALS' SUPPLY CO., LTD., Plant House, Longfield Avenue, Eatling, W.S. Tel.: EALING 3171.

FOR SALE, 10RB, Skinner and Backhoe; Smith 210, with F/S, Skinner and Backhoe; also RR462, 70ft. Dragline.—B.G. PLANT (SALES AGENCY), LTD., Watlington, Oxon. Watlington 44.

FOR SALE: Demonstrator Shawnee Poole 7 cu. yd. REAR DUMP, first-class condition, £1,800 o.n.o.—HARTWELL TRACTORS, High Street, Cuddesden, Oxon. Shawnee Poole Main Distributors.

WANTED to PURCHASE late model Priestman Wolf machine; also late model Priestman Cub Mk. V. Write Box P.1247, "The Contract Journal."

WANTED, 12-ton DERRICK, 80ft. Jib.—ROBERT DIXON, LTD., Hunsdon, Herts. Tel.: Stanstead Abbots 301.

FOR SALE, 5-ton Coles Mk. V Petrol/Electric MOBILE CRANE with 17ft. 6in. Jib, full circle slewing and mounted on four solid rubber-tyred wheels, in good second-hand condition, price £575 or near offer.—Write Box P.1217, "The Contract Journal."

FOR SALE: Demonstrator Shawnee Poole 7 cu. yd. REAR DUMP, first-class condition, £1,800 o.n.o.—HARTWELL TRACTORS, High Street, Cuddesden, Oxon. Shawnee Poole Main Distributors.

WANTED to PURCHASE late model Priestman Wolf machine; also late model Priestman Cub Mk. V. Write Box P.1247, "The Contract Journal."

WANTED, 12-ton DERRICK, 80ft. Jib.—ROBERT DIXON, LTD., Hunsdon, Herts. Tel.: Stanstead Abbots 301.

DUMPERS

Three late 1958 THWAITES TUSKER 4-wheeled Diesel DUMPERS, capacities 22 cu. ft. wet concrete. Completely reconditioned and guaranteed for three months, resprayed, £325 ex works.

Two THWAITES JUMBO 4-wheeled Diesel DUMPERS, capacities 14 cu. ft. wet concrete. Completely reconditioned, resprayed, and guaranteed for three months, £240 and £275 ex works.

Five THWAITES 3-wheeled HYDRAULIC TIPPING DUMPERS, capacities 12 cu. ft. ALL IN GOOD CONDITION, overhauled, but NOT reconditioned, from £75.

NEALE-WRIGHT & COMPANY LTD., 150 PARADE, LEAMINGTON SPA. Telephone: Leamington Spa 924 and 230. London Gladstone 8174.

FOR SALE, ex stock, at keenest prices: Barber-Greene Model 879A (1952), fitted Perkins P6 Diesel. Recently overhauled, in very good condition. Price £1,650.

22RB, choice of two, 19000 Series. £2,250.

10RB, choice of several late machines, from £1,250.

Priestman Wolf 3A and 3B, from £1,000 to £1,500.

Ransomes and Rapier 423 (%), new 1952, fitted Shovel. £150 Spares, little used. Price £1,400.

Full list of above excavators sent by return.

Muir-Hill SHOVEL (1953), fitted Fordson Diesel Engine. Excellent order. Cheap. £375.

Fordson Ford 10/10 D. MOBILE, with special low reduction gear. Equipment hardly used since fitted to Fordson. £135.

2D SU (1949) TRAXCAVATOR, with Spares valued about £300. £340.

LS9 SCRAPER, new 1949, good tyres, £500.

6T TRENCHER, Model 1952, £2,000.

5-ton Single-motor SCOTCH DERRICK, with Auto Indicators, 80ft. Jib. Very good structure. Keen price to clear.

EXCAVATOR EQUIPMENT, all types available.

SAVILLE-CALVERT (MACHINERY), LTD., Harvester House, Stratford-upon-Avon, Warwickshire. Telephone 4242.

W. AND J. ARMSTRONG (CONTRACTORS), LTD.

OFFER FOR SALE:

Drott Skid SHOVEL, 18 months old, worked 2,000 hours, £2,450.

Allis-Chalmers HD5G, 7181, fitted new tracks, reconditioned rollers, etc., £1,750.

Allis-Chalmers HD5G, fitted new rollers, £1,550.

Caterpillar D7, 7M, with Hydraulic Angledozer, £700.

Caterpillar D7, 7M, with Hydraulic Angledozer, fitted new chains, sprockets, etc., £1,950.

Caterpillar D6, fitted Birtley Hydraulic Angledozer and Compactor 2½ C.G. £2,750.

D4N and D7N Hyster WINCHES.

D4 6U and 7U, and D6 2H SPARES in stock.

The above machines are also available for immediate HIRE.

Please 'phone HAYES 0303/0074, or write:

W. AND J. ARMSTRONG (CONTRACTORS), LTD., 1a Byron Parade, Uxbridge Road, Hillingdon, Middlesex.

PLANT FOR SALE:

Stothert and Pitt 10/7 Diesel CONCRETE MIXER.

Also Benford 7/5 Bucket Loading Petrol Datto.

Quantity Wingate and Linn CONCRETE KERB MOULDS.

B.R.C. 3in. mesh REINFORCING FABRIC, in rolls.

Flange Bolts JUBES, 15in., 18in. and 22in. dia.

Morris 3-ton OVERHEAD RUNWAY, 20ft. span, Sets unused, 2½-ton Shear legs.

Blaw Knox BLM. CONCRETE ROAD FORMS.

A. H. KIMMINS AND SONS, LTD., Lyndhurst Road, Worthing.

CONVEYOR BARGAINS:

150 18in. x 6in. pitch 8ft. Gravity ROLLER CONVEYORS at £4 each.

45 deg. BENDS for 18in. x 6in. pitch Gravity Roller CONVEYORS at £2 each.

WILLIAM R. SELWOOD LTD., Chandler's Ford, Hants. Phone 2275.

WANTED: ROAD ROLLERS:

Aveling-Barford and Marshall, 7-ton, to 8-ton Diesels, 1948 or later, with Scarifiers, etc. Also late 2-ton model.—Full particulars and price to A. M. COLE, Eastgate, Sleaford, Lincs. Tel. 463.

FOR SALE: 5-ton Coles Mk. V Petrol/Electric MOBILE CRANE with 17ft. 6in. Jib, full circle slewing and mounted on four solid rubber-tyred wheels, in good second-hand condition, price £575 or near offer.—Write Box P.1217, "The Contract Journal."

FOR SALE: Demonstrator Shawnee Poole 7 cu. yd. REAR DUMP, first-class condition, £1,800 o.n.o.—HARTWELL TRACTORS, High Street, Cuddesden, Oxon. Shawnee Poole Main Distributors.

WANTED to PURCHASE late model Priestman Wolf machine; also late model Priestman Cub Mk. V. Write Box P.1247, "The Contract Journal."

WANTED, 12-ton DERRICK, 80ft. Jib.—ROBERT DIXON, LTD., Hunsdon, Herts. Tel.: Stanstead Abbots 301.

PILING for DISPOSAL

Once driven suitable for re-use

BP4 Larssen Box Piles

200 Tons in lengths 36'-42'

4B Larssen Sheet Piles

400 Tons in lengths 18'-38'

Prices by negotiation

Available for inspection at

BERKELEY POWER STATION, GLOS.

Tel: DURSLEY 2361. EXT. 102.

BALFOUR, BEATTY & CO., LIMITED

Tel: TOTtenham 0401

(10 lines)

MOORE'S CRANE
15 cwt, 2 ton, 4 ton mobile. 5 ton, 10 ton, 15 ton Lorry Mounted.

HIRE
Tel: TOTtenham 0401
(10 lines)

PLANT AND MACHINERY WANTED—FOR SALE—FOR HIRE

FOR SALE.
500 tons Larsson and Appleby-Frodingham STEEL SHEET PILES, Nos. 1, 2, 3 Sections.
No. 7 German-Terry PILING HAMMER, with leg guides.

4in Johnson Portable Diesel PUMPING SET. Recond. Two Blaw Knox CEMENT SILOS 30 tons capacity. New 1958.

No. 16 Spencer-Hopwood BOILER, fully insured, 110lb. KL4 MOBILE CRANE, Ruston Diesel, pneumatics, 30 ft. lift. Jib. New 1955.

Weatherill SHOVEL, 3/4yd., Ford Diesel. New 1955.

10-ton PORTASILO. New 1959.

2-ton Broomware PORTABLE COMPRESSOR, Lister Diesel.

Neals N MOBILE CRANE, 20ft. Jib. Recond. engine. 50 tons TRENCH SHEETS, 10/12/14ft.

DUDLEY VALE, LTD.

3 Buckingham Place, London, S.W.1. VIctoria 0252.

FOR SALE.
Smith Super 20, new 1948, with Dragline, Skimmer and Backacter Equipment, in excellent condition. Can be seen working at Wigan, Lancs. £900.

10RB 12300 Series, with Skimmer, Backacter and Dragline Equipment. Can be seen working at Bradford, Yorkshire. £1,050. o.n.o.

1948 Seddon Diesel LOW-LOADER, 12-ton carrying capacity, k.o. max. axle. £300.

CORNELL & CO., Manchester, 13. Husholme 1769.

SURPLUS CONVEYOR BELTS. New, unused and second-hand. Most widths up to 36in. in stock for immediate delivery. Second-hand Belts supplied on sale or return basis.

G. E. SIMM (MACHINERY), LTD., Sheffield: 27 Broomgrove Road, (Tel. 64436), Glasgow Area: Luggie Bank Road, Kirkintilloch (Tel. 2468), London: 33 St. George's Drive (Tel. 8772), South Wales: 1 F. 5 Kingsway Trading Estate, Bridgend (Tel. 1567).

WORKING IN THE LANCs. AND CHESHIRE AREA? Woolfenden's are your MOBILE CRANE people. Light or heavy. London, Michigan, Quick-Way, Neals. Jib lengths to 100ft.

WOOLFENDEN'S, Anfield, Liverpool, 4. Stoneycroft 3755.

FOR SALE—We have a few very good DRAGLINE BUCKETS for Lima or similar machines, 3 1/2yd. 2 1/2yd. and 2yd., complete with Dressings.

PLANT SALES, LTD., 25 Castle Street, London, W.1. PAD. 2663/5.

MOBILE LIFTING SERVICES, with Lorry-mounted Cranes of up to 50 tons capacity, are available throughout the country. For service in the London area, write to TARSAG, LTD., 146 Grosvenor Road, SW.1, or 'phone VIctoria 0407.

MILLARS 14/10 Closed Drum CONCRETE MIXER, complete with Built-in Weigher, fitted with electric motor or Ruston Diesel Engine, overhauled and in excellent order. — W. V. DAVIES, Concrete Mixer Service, Shipton-on-Stour. 'Phone 125.

WANTED TO PURCHASE, PRIESTMAN WOLF, fitted with Skimmer and Backacter, and/or Dragline. Also set of Backacter Equipment for use with same, fitted with narrow trenching bucket or narrow bucket only. — Write Box F.1205, "The Contract Journal."

AVAILABLE FOR HIRE: EXCAVATORS, BULLDOZERS, DOZERS, DUMPERS, MIXERS, CAGES, CRANES, etc. All classes of LORRIES, including Low-loaders. AMEY'S AGGREGATES, LTD., Lower Wootton, Boars Hill, Oxford. Oxford 35421.

FOR IMMEDIATE HIRE
EXCAVATORS, TRAXCAVATORS, BULLDOZERS, COMPRESSORS, MOBILE CRANES, ROLLERS. Keen rates — Low haulage. SITE CLEARANCE SUB-CONTRACTS.

PLANT HIRE AND SALES, LTD., Millbrook Point Road, Southampton. Telephone 75271.

CONTRACTORS' PLANT FOR HIRE.
Selection from our comprehensive fleet of Modern Plant and Equipment. Immediate delivery.

CRANES (standard gauge):

18-ton Brownhoist, Shunter, 50ft. Jib.

10-ton Coles, shunter, 40ft. Jib.

10-ton Grafton, Diesel, 34ft. Jib.

8-ton Grafton, Diesel, 35ft. Jib.

5-ton Grafton, Diesel conversion, 35ft. Jib.

5-ton Smith, 50ft. Jib (two).

CRANES (MOBILE ROAD):

Lorain 10-ton, lorry-mounted, extendible Jib, 30ft. Jib.

Ruston 10-ton, track-mounted, 40ft. Jib.

Ransomes 8 1/2-ton, Diesel, 21ft. Jib, 1942.

Coles 6-ton, Diesel/Electric, new 1948.

Coles 5-ton, Mark 7, on Thornycroft Diesel chassis.

Jones 5-ton, KL44, Diesel, 1948.

Coles 5-ton, Diesel/Electric, new engine.

Jones 3-ton, Super 4. Three available.

DERRICKS:

7-ton Anderson-Grice, 100ft. Jib, 400/3/50.

5-ton Anderson, 70ft. Jib, 400/400/3/50.

7-ton Ruston, Hand, 30ft. Jib.

1 1/2-ton Smith, Hand, 35ft. Jib, new 1952.

EXCAVATORS:

Three 10RBs, 1940-51, Shovels and Draglines.

Osgood 1 1/2-ton, Diesel, Shovel and Dragline.

LOCOMOTIVES:

Stephenson Diesel Locomos, 150-h.p. (two).

Barclay 80-h.p.; Ruston 88-h.p., Diesel.

Bagnall Steam, 14in. x 22in., oil-fired.

Pockett Steam, 7in. x 12in.

BULLDOZERS:

D4 and TD18, fully reconditioned, with Angle-dozers.

PORTABLE BOILERS:

Mobile, Oil-fired, Economic, on pneumatics (150lb. evaporation), also Static, Coal-fired.

AIR COMPRESSORS: (on pneumatics):

Two 210 c.f.m., 100 p.s.i., Diesel, 1953.

Two 160 c.f.m., 100 p.s.i., Diesel, Worthington.

Four 105 c.f.m., 100 p.s.i., Diesel, Broomwade.

ROLLERS:

12-ton Aveling, Diesel.

9 1/2-ton Marshall, Diesel.

6-ton Huber, Diesel (two).

3-ton Aveling-Barford, Diesel.

2-ton Aveling, Diesels (three).

DUMPERS:

Three Muir-Hill 14B, Diesel, 4 1/2yd.

Two Muir-Hill 10B, 2 1/2yd.

CONCRETE MIXERS:

Mobile, 1 1/2-ton, Petrol-driven.

Winton Roller, Pan Mixer, Diesel, 4ft. 6in. pan.

Contractors' Pumps, Roadforms, Flexible Hoses (up to 10in.), Steel and Cast-iron Pipes up to 20in.

Electric Motors, Diesel Engines, Portable Crushing Plant, Light Railway Equipment and Locomotives, Scalloping, Flotation, etc.

FRED WATKINS (ENGINEERING), LTD., Bredbury, Glos. Telephone 2271/2.

D9, D8, TD18 and TD14 BULLDOZERS and SCRAPERS, Motor Graders, Excavators and new Tippers for HIRE or SUB-CONTRACT WORK.

Particular attention given to finish and compaction. New and modern machines in first-class condition. Good operators. Technical staff available to analyse, programme and price complex projects.

DICK CROFTON, Broadview Farm, Blacknest, Alton, Hants. Telephone: Bentley 2241.

FOR SALE: P20 PORTASILO, 20 tons capacity. New 1959. Really excellent condition.

DUDLEY VALE, LTD., 3 Buckingham Place, London, S.W.1. VIctoria 0252.

BUNKER CLAMSHELL GATES

LEVER OR AIR OPERATED
ALL STEEL CONSTRUCTION



MAXIM CONVEYORS
(ENGLAND) LTD.
BELVEDERE • KENT
Ring ERITH 4223

PLANT BARGAINS, ex Stock. DINKUM MAJOR 1 and Power Shovel, Cab, two Buckets, 1958. £1,650.

Drott 5-ton 1 SKID SHOVEL, BTD6, 1958, £2,450.

KL44 Jones 4-ton CRANE, pneumatics, Diesel, 24ft. Jib, 1950, £1,450.

Benford Model W Reverse Drum 18/12 MIXER, Scraper and Hydraulic Weigher, complete, 1958, £200.

Atos Hydraulic TRENCHER, late model, 3 Buckets, £500.

Walls-Stevens 2 1/2-ton Diesel ROLLER, Sprinklers, £450.

Exton 5 1/2-ton Low-Load PLANT TRAILER, almost new, £350.

Stothert 6 1/2-cwt. Vibrating ROLLER, Spray Gear, £250.

Rapier 410 EXCAVATORS, Diesel, Skimmer, Trencher, Face Shovel. From £950.

Greens 6 1/2-ton ROLLERS, ex Ministry, Petrol-paraffin, with Spray Gear, Scarifier available ex £650.

Stothert 4 1/2-cwt. Vibrating ROLLER, hand propelled, £85.

Greens Unrolli 1 Low-Load PLANT TRAILER, £175.

DINKUM DIGGERS, on Diesel Tractors, with Front Shovel. From £650.

Liner 4ft. 6in. Roller Pan MIXER, Petrol Diesel, £185.

Aveling-Barford 4-ton Petrol ROLLER, ex Ministry, very good, £475.

Rapier 4in. Diesel PUMPS, Perkins P4, on four wheels, £180.

Rey 10/10 Closed Drum Diesel MIXER, Ruston Engine, £300.

Stothert 10/7 Diesel MIXERS, Power Loader, £175.

Little Benford MIXERS, trade in, need overhaul, £20 each.

3/2 Power MIXER, on Trailer Chassis, checked over, £60.

Benford 5 1/2-ton MIXER, high-speed trailer type, Petrol, £85.

Benford 5 1/2-ton, four steel wheels, Petrol, £65 each.

Clifford 2-ton COMPRESSOR, Perkins P4 Diesel, four wheels, £300.

Chasewater 2 1/2yd. Rope SHOVEL, Petrol, ex Council, £95.

1,200-gal. TANK, on Ford lorry, good, £125.

Pegson 4in. Contractors' PUMPS, 36,000 g.p.h., gift, £125.

Smith 2/10 EXCAVATOR, Diesel, Face Shovel, 1946, £475.

Rapier 6-ton Petrol/Electric CRANE, ex Ministry, £650.

Morris 2 1/2-ton Petrol/Electric CRANE, ex Railways, £350.

Muir-Hill LOADING SHOVEL, Perkins P6 Diesel, trade in, £195.

Road Machines 12yd. Portable BINS, four wheels, ex Weighbatcher, £175.

WILLIAM R. SELWOOD, LTD., Chander's Ford, Hants. Phone 2275.

FOR SALE Goodwin-Barby Goliath Portable CRUSHING AND SCREENING PLANT, comprising Primary Section with 24in. 150-ton Jaw Crusher, Secondary Section with Granulator, Triple-deck Screen and Discharge Conveyors. Both sections complete with road wheels and brakes and Dorman Diesel-powered; machine very little used after purchase for use on short contract now ending. — Write Box P.1213, "The Contract Journal."

ALLEN 12/21 for SALE. Good condition. £1,000.

WHITEHEAD OF MANSFIELD. Tel.: Mansfield 1321.

FOR SALE, 6in. Electric Blaw Knox CONCRETE PUMP—B.G. PLANT (SALES AGENCY), LTD., Watlington, Oxon. Watlington 44.

SLOGGETTS (ENGINEERING) Co. Ltd.

COMPRESSORS OF ALL TYPES FOR HIRE

2 Burtons Road, Hampton Hill, Middx.

Telephone: Teddington Lock 1138/9

FOR LIMAS

PLANT SALES LTD.,

25 CASTLEBREATH STREET, LONDON, W.1

Telephone: PADdington 2442-4

Hire it from ABELSON

Phone: SHEldon 2424

Pointing the way...
TO CONSTANT ACCURACY IN
PROPORTIONING AND
LOWEST CONCRETE
PRODUCTION COSTS

As complete range . . . 3 1/2T, 5T, 7T, 7S, 10S, 12S and 14S, with choice of steel wheels or pneumatics. Folding Hydraulic Weigher and Drag Loader Shovel available for 7S, 10S, 12S and 14S models. Illustrated literature and prices on request.

BLAW KNOX LIMITED

Box No. 146 90/94 Brompton Road, London S.W.3. Telephone: KENsington 5151



BK 579

PLANT AND MACHINERY WANTED—FOR SALE—FOR HIRE

WILSON PLANT HIRE offer the following: Priestman Tiger Mk.V EXCAVATOR, No. A7650, purchased new in August, 1955, fitted with Dorman 4LA Diesel engine, with 24in. tracks, any equipments. First-class condition throughout. Murex WELDING SET, Type GC002, Serial No. 34112, 9-kW 30-V 300/400-Amp., with Perkins P4 engine, mounted two pneumatics, with towbar. Murex WELDING SET, Type GC002, Serial No. 34112, 9-kW 30-V 300/400-Amp., with Perkins P4 engine, mounted two pneumatics, with towbar. SKIMMER BUCKET for Priestman Wolf Mk.IIB and Mk.IV Excavators. Dorman 4BKII DIESEL ENGINE, fully reconditioned, complete with fuel pumps, injectors, water pump, fan, flywheel and housing, but less starter and dynamo. Suitable for 10ft. 6in. bucket. Two 3in. Auto Diesel CENTRIFUGAL PUMPS. One 4in. Auto Diesel CENTRIFUGAL PUMPS. One 4in. Auto Diesel LIFT AND FORCE PUMP. Several Parker 5 1/2in. CONCRETE MIXERS. SKIMMER BUCKET for Tiger Mk.V Excavator.

WILSON PLANT HIRE, LTD., Weedon Road, Northampton. Telephone 4653/4.

WANTED, WANTED, WANTED. Heavy EARTHMOVING MACHINES and EQUIPMENT of all types. Modern machines preferred, others considered. Immediate inspection; spot cash settlement. Write, giving full details of location, to A.R.C. MOTOR CO. LTD., Redhill Works, Arnold, Nottingham. Telephone: Nottingham 263331/5.

SLOGGETTS (ENGINEERING) CO., LTD. for HIRE, DINKUM DIGGERS, modern machines. 2 Burtons Road, Hampton Mill, Middlesex. Telephone: Teddington Lock 1138/9.

URGENTLY REQUIRED, SHEET STEEL PILING. any quantity and length considered. Write Box G.G.393, "The Contract Journal."

R REQUIRED. 6/8-ton ROLLER, Second-hand. Diesel Engine. Price, condition, and where can be seen, to E.K. PLANT, LTD., Folkestone.

WANTED. modern 22RB with 60ft. Crane Jib. Write Box P.1199, "The Contract Journal."

ROAD-FORMS
FOR SALE OR HIRE

TELEPHONE

LONDON : AMBassador 3456
BIRMINGHAM AREA : Walsall 6085
BRISTOL : Bristol 655244
SOUTH WALES AREA : Penarth 57388
GLASGOW : Bridgeton 1041
LEEDS : Leeds 76514
LIVERPOOL : Aintree 7335
MANCHESTER : Deansgate 7054
NEWCASTLE : Newcastle 86-9493
EAST COUNTIES AREA : Saffron Walden 2552
SOUTHAMPTON AREA : Locks Heath 3021
ACROW (ENGINEERS) LTD.

DOE'S COLUMN

GRAND CLEARANCE SALE

10% off all prices quoted for used industrial machines during February.

1954 DINKUM DIGGER, 24in. Bucket, on new-type Fordson Major Diesel Tractor, on newly-powdered 11 x 36 and 600 x 19 pneumatics. Electric starting and fitted with Skyhi 3in. cu. yd. front-mounted Hydraulic Loading Shovel and extra Bulldozer Blade. £1,550

1955 Bray BL430 Four-wheel-drive LOADING SHOVEL, with 1 cu. yd. full crowd-action Bucket. Has operator's comfort-enclosed, widevision Cab. Ford 4D Industrial Diesel Engine with electric starting. On very good 1400 x 24 and 850 x 20 pneumatics. Satisfactory condition. £1,750

1957 Bray BL430 Four-wheel-drive LOADING SHOVEL, with 1 cu. yd. full crowd-action Bucket. Mounted on nearly new pneumatics, size 1400 x 24 and 10.50 x 16. Full vision operator's comfort Cab. Overhauled, tested, resprayed. £1,550

1955 Bray 1 cu. yd. Crawler LOADING SHOVEL completely rebuilt throughout and guaranteed. £1,950

1954 Bray HL20 Hydraulic LOADING SHOVEL, with 1/2 cu. yd. crowd-action Bucket. Overhauled throughout and fitted new 1400 x 24 and good 750 x 20 pneumatics. A rare bargain. £750

Bray Hydraulic LOADING SHOVEL, powered by Perkins PE Diesel Engine. Good concern. £345

1957 Skyhi Heavy-duty LOADING SHOVEL, with 1 1/2 cu. yd. Bucket, on good 1400 x 24 and 750 x 20 pneumatics. Powered by Ford 4D Diesel Engine. Very carefully maintained. £1,950

1950 Chaseside 1 cu. yd. Cable-operated LOADING SHOVEL, powered by Perkins PE Diesel Engine. Good cheap machine. £185

Chaseside 1/2 cu. yd. Cable-operated LOADING SHOVEL, in working order. £95

1956 new-type Fordson Major DIESEL TRACTOR, with electric starting, on good pneumatics, front Cab and front-mounted Skyhi 3in. cu. yd. Loading Shovel. £650

1953 new-type Fordson Major DIESEL TRACTOR, with electric starting. Can be seen working. £250

Muir-Hill LOADING SHOVEL, with 5 cu. yd. Shovel. In working order. £165

Bristol 22 CRAWLER BULLDOZER, powered by Perkins P3 Engine. A smart little Bulldozer. £125

International T6 CRAWLER TRACTOR. £135

ERNEST DOE & SONS LTD.

Ulting, Maldon, Essex

Telephones: Day—Hatfield Peverel 311. Sales, Mr. Hall, works, Mr. Bennett; field service, Mr. G. Goddard, Maldon. Night—Sales, Hatfield Peverel 319; Service and spares, Hatfield Peverel 312.

QUANTITY of Equipment, including: CRANES, LIFTING, HOISTING, CARRYING and CONVEYING EQUIPMENT, AIR COMPRESSORS and RECEIVERS, ELECTRIC MOTORS, PAINT MIXERS, INSPECTION and TEST EQUIPMENT, MACHINE TOOL CHUCKS, ACCESSORIES, PUMPS, DREDGES, TRACTORS, EQUIPMENT and SPARES, ENGINE, ELECTRICAL EQUIPMENT, TABLES, LOCKERS, BENCHES, BALING PRESS, WELDERS, TRACTORS, TRUCKS, TRAILERS, BLOWERS, FANS, CYCLOONES, STOVING OVENS, BOILERS, CANTEEN EQUIPMENT, OFFICE EQUIPMENT, CONCRETE PUMPING, BAND PHOTOGRAPHIC EQUIPMENT, and numerous other items. Detailed lists on request—R.D. AND M. ENGINEERING CO., Sandy Lane, Dukinfield, Cheshire. Tel: AShton-under-Lyne 2871/2.

WANTED. TRACTORS and Bulldozers, any condition; also Parcels of Spares for same. Prompt SPARE PARTS available for TD6, S, 14, 18, Caterpillar D2, D4, Fowler VF, FD3, Allis M and County.

ROBIN BOSWORTH, Tel: Stoke Saint Milbre 237. Mr. Ludlow, Shropshire.

DELMAG Diesel PILE HAMMERS. D HIRE your machines from Britain's largest fleet. Models D5, D12 and D22 available with rope suspended leaders and leg guides. Suitable for any section of pile.

DUDLEY VALE, LTD., 3 Buckingham Place, London, S.W.1. VICTORIA 0252.

BUCKET SPECIALISTS—Special or Standard SHOVEL, TRENCHER, GRAB and DRAGLINE BUCKETS to suit all machines. Quick delivery—Write or phone the makers: NORTONS PLANT HIRE, LTD., Billericay, Essex. Tel: Ramsden Heath 365.

LIMA 1201 Heavy-duty CRANE, fully rigged with genuine American 100ft. Boom and Jib to British maximum rated capacity, fully insured. Available for HIRE with skilled operator.

PLANT SALES, LTD., 25 Castle Street, London, W.1. PADDINGTON 2663/5.

FOR SALE. International TD18 CRAWLER TRACTOR, Serial No. 5725, with Ruston-Bucyrus P24 P.C.U. and with Le Tourneau Model LS 9 cu. yd. Scraper. In good working order. £1,150.—WESTERN CONTRACTORS SERVICES, LTD., Severn Road, Hallen, Bristol.

FOR SALE. Set of TD18 ROLLERS, reconditioned, new bearings and oil seals, £12 10s. each. Set of BTD6, fully reconditioned, £8 10s. each.

LOGGING WINCH for TD9, £85.

HYSTER WINCH for D4, £150.

LT Double Drum WINCH for D4, new, £200.

RB ANGLEDOZING EQUIPMENT for TD18, £500.

Bray ANGLEDOZING EQUIPMENT for HD7, £200.

BLA KNOX ANGLEDOZER for D4, new, £250.

RB ANGLEDOZER for BTD6, as new, £300.

ANGLEDOZING EQUIPMENT for Fiat 55L, £250.

Large stocks of SECOND-HAND SPARES for TD18, TD14, TD9 and TD6, D4, D2 and D8.

N. M. GREEN, Kirkby Underwood, near Bourne, Lincolnshire. Tel: Dowsby 285; (nights) Gosberton 305.

FOR IMMEDIATE SALE AND REMOVAL. Morgan 12-ton Electric Derrick CRANE, 84ft. lib. Morgan 7-ton Electric Derrick CRANE, 100ft. lib. Smith-Rodley 5 1/2-ton Diesel Crawler CRANE, Soft 100ft. lib. Sentinel 75-kVA 3-phase Diesel ALTERNATOR SET, as new, 4-wheel drive.

For prices and further particulars, apply:

PYMAN, BELL AND CO., LTD.

65 Quayside, Newcastle upon Tyne, 1.

TWO Two-ton Broomwade Portable COMPRESSORS to Administer specification fitted with new F4D Engines. March 1958, main bearing in first-class order as part of hire fleet, offered at £400 each as and where lying. Also several SV12B Mobile and Lorry-mounted Machines available, prices on application.—HIREPLANT, LTD., North Circular Road, Stonebridge Park, N.W.10.

ONE 10RB, B600 Series, complete with Skimmer, Backhoe and Dragline, ready for work; net weight, lying, Hanworth 800ft. near.—MARSH PLANT AND MACHINERY CO. LTD., South Street, Emsworth, Hants. Tel: 2033, 2634.

WANTED, in lots, Muir-Hill 2yd. and 3yd. DUMPERS. Petrol Engines, with good tyres. HOLLINGS & ANDREWS (WELDING ENGINEERS), LTD., East Bush Lane Works, Oley (2940), Yorks.

FOR SALE. TD18 ANGLEDOZER, 1952, price £1,500. Seen England.—S. McCORMICK, LTD., Jamestown Road, Inchicore, Dublin.

600

PROCESS PLANT FOR SALE

DOUBLE TOGGLE JAW CRUSHER by Broadbent. 21in. x 10in. plain bearing type with flywheel 54in. dia. and F. and L. pulleys.

SINGLE TOGGLE GRANULATOR by Frederick Parker. 20in. x 5in. semi-steel body, main bearing, fitted manganese granulating jaws. Pulley drive.

PORTABLE CRUSHING AND SCREENING PLANT, 16in. x 9in. with Underslung Rotary Screen, Diesel engine driven. Capacity 8-10 tons per hour. Several available. Makers: Parker, LTD., Parker, Morden.

COMPOUND TUBE MILL by Johnson, Type 3C, tube of welded plain plate construction, 12ft. long x 3in. dia., first compartment 27in. long, fitted manganese liners; second compartment fitted plain liners, thick. Gear drive from 25-h.p. 400/3/50 cycles motor with start.

STAG NO. 2 MULTI-HAMMER PULVERISER by Edgar Allen, manganese steel reversible hammers, shaft fitted 26in. dia., a 4in. face flywheel and vice rope pulley. Open bottom-type machine, fitted manganese liners, adjustable hinged breaker plates. Body cast steel. Drive from 30-h.p. totally enclosed motor.

GEORGE COHEN

Sons & Company Limited

WOOD LANE, LONDON, W.12.

Telephone: Shepherds Bush 2070.

And Stanningley, nr. Leeds. Tel: Pudsey 2241.

PUMPS

SALE OR HIRE

★
THE GREENWICH PUMP & PLANT CO. LTD.

DENHAM ST., GREENWICH, S.E.10
GREENWICH 3169

DIESEL-PETROL & STEAM ROLLERS



FOR HIRE

BOMFORD & EVERSHED LTD.

SALFORD PRIORS, Evesham, WORCS.

3/2 MIXERS 'Half-Bag'
FOR HIRE

30/- PER WEEK

PETROL OR ELECTRIC—1 PHASE

JOHN MACNAMARA & CO. LTD.,
Bush Rd., Deptford, London, S.E.8 Bermondsey 3275-1435

HIRE
PLANT HIRE & SALE
Excavators
Bulldozers
Scrapers
Mixers
Pumps, etc.
★
Spares from stock.

WYDOWN ROAD,
HARLEMERE, SURREY

Telephone: HASLEMERE 2294/5

USED CONTRACTORS' PLANT FOR SALE

DINKUM DIGGERS

1954 machine, in excellent condition, overhauled transmission, pins and bushes, Skyhi Front Shovel. £1,200.

1954 machine, fitted with latest type Hydraulic Dozaloda. Every bit as good as 1957 machine. £900.

1955 machine, fitted latest type Dozaloda. Requires small amount overhaul which can be done in user's workshop. As seen, £800. Guaranteed, £950.

1958 DINKUM MAJOR. This machine is an outstanding offer. 14ft. digging depth—fastest output of any similar machine. New tyres all round. Engineer's report and Guarantee on request. £1,600.

GENERAL

1 1/2 cu. yd. Diesel DUMPER, new 1958. Guaranteed, £300.

SMITH SUPER 10, ready to go on site, insured against breakdown. Backsaver and Skimmer Attachments. £750.

1955 10cu. yd. STEEL DUMPER, little used. Steering faces hopper; excellent for site of quarry work. New price £1,800 but this machine is offered for quick sale. Engineer's report on request. £750.

MAIN DISTRIBUTORS for the new and revolutionary DINKUM DIGGER MAJOR HYDRAULIC EXCAVATOR and the WHITLOCK POWER SHOVEL for the counties of Hertfordshire, Bedfordshire, Cambridgeshire and Huntingdonshire.

Also full range of Earthmoving Equipment and Contractors' Plant, new and used. Part exchange welcomed.

CHASESIDE MOTOR CO. LTD.,

47 CASTLE STREET, HERTFORD.

Telephone: Hertford 2456.

PLANT AND MACHINERY WANTED—FOR SALE—FOR HIRE

VALES PLANT REGISTER, LTD.
OFFER FOR IMMEDIATE SALE: MISCELLANEOUS:

BLAW KNOX BATCHMASTER, 1955, overhauled, on WINGER 14/10 10NT MIXER, new 1955, Lister Diesel, Dragshovel. Very good condition, £375. LOW-LOADING TRAILERS, 3, 5/6 and 8/10 ton, ex Ministry. Also TRAILER-MOUNTED TANKS, 200, 500 and 750 gallons. AIR PUMPS 2/3-Tool COMPRESSORS, Lister Diesel Engines, on 2- or 4-wheel trailers or lorries etc. Ex Ministry. Unused, from £440/£485 each.

ATLAS, INGERSOLL, AIR PUMPS and BROOMWADE 2-Tool and 3-Tool Diesel PORTABLE COMPRESSORS, and 4-wheel trailers. In good condition, £300—£350 each.

C.P.T. 500 cu. ft. PORTABLE COMPRESSORS, Ruston Engines, on pneumatics, late 1954. In very good condition, £95 each.

AUTO MOWER 30cwt. Petrol ROLLER, J.A.P. Engine, New 1953. Good condition, £195.

AVELING-BARFORD 2/3-Tool ROLLER, Petter Engine, sprinklers. Good condition, £400.

AVELING-BARFORD 6-ton ROLLERS, scarifiers, sprinklers and cabs, Perkins Engines, New 1953 and 1955, £2,000 and £2,375 each.

PEGSON 6in. x 9in. PORTABLE CRUSHING AND SCREENING PLANTS, Ruston Diesel. Unused, new, £750 each.

CATERPILLAR DW21 18/25 cu. yd. Low Bowl MOTOR SCRAPERS, with C.C.U. and cabs. New March, 1958, £11,500 each.

STDG TRACTORS and Dozers, from £1,050 each.

D4500 TRACTOR, 50 cu. ft. Dozer and Winch, £1,400.

CATERPILLAR D8 134 cu. ft. ROLLER, Birtley 8A Hydraulic Dozer and P.C.U., £5,000.

CATERPILLAR D9 19A TRACTOR, base machine, Rebuilt, £10,400.

INTERNATIONAL TD18 TRACTOR, with Hydraulic Dozer, Winch and cab. New August, 1958.

Excellent all round, £6,150.

BIRTLEY and CATERPILLAR Model 70 10/12 cu. yd. SCRAPERS. New 1953/4. Recently overhauled, £1,150 each.

EUCLID 15-ton and 22-ton DUMP TRUCKS, Cummins and Rolls-Royce Engines, £1,500 and £6,000 each, respectively.

PORLASILLOS, P20 Type, new 1957, £450 each.

365 tons FRODINGHAM 4 PILING, in 30/58ft. lengths. Once driven.

MUIR 14/18 cu. yd. DUMPERS, Perkins Engines. Good condition, £625 each.

FOR A COMPREHENSIVE LIST OF PLANT FOR SALE AND HIRE — SEND FOR VALES FREE PLANT REGISTER.

Further details: 14 Lower Grosvenor Place, London, S.W.1. Victoria 7531, 3501, 8080, 9886 (10 lines).

FOR SALE: Bentor 18/12 Reversing Drum MIXER, with Winch, Petter Diesel, electric drive, new December, 1957, good condition.

Also similar machine with new Petter AVA2 Diesel Engine.

Mon-Rail Petrol and Diesel-driven POWER WAGONS, 1,500ft. Rail and Stands.

J. J. JOHNSTON AND CO., LTD., 271 Uxbridge Road, London, W.12. Tel.: Shepherds Bush 6941/2/3.

ONE 320 h.p. 500 r.p.m. 4-cylinder Petter Supercharged DIESEL ENGINE, No. ARA347, complete with air-starting equipment, number 2000, square, including four new pistons, liners, etc. (latest type), cylinder head, etc.—Offers, including dismantling and loading as and where standing to ARENIG GRANITE CO., LTD., Arenig, near Bala, North Wales.

FOR SALE: One 10 cu. yd. SCRAPER, well shod, £950. One Ruston 50 cu. ft. SCRAPER, 10 cu. yd. x 24-ply tires, good condition, well shod, £300.

P. MERRIMAN, LTD., 45 Leicester Road, Syston, near Leicester. Tel.: Syston 3021.

FOR SALE: New 8cu. ft. Greens—Griffin Vibratory ROLLERS. Immediate delivery from stock.—WILLIAM G. SEARCH, LTD., Whitehall Road, Leeds, 12. Tel.: 639081 (10 lines).

FOR IMMEDIATE HIRE: KL44 MOBILE CRANES, pneumatics, Jibs up to 50ft. DUDLEY VALE, LTD., 3 Buckingham Place, London, S.W.1. Tel.: VIC. 0252.

LORRY-MOUNTED CRANES, from 6 to 50 tons, available throughout the country.—TARSLAG, LTD., operate a London service, from 146 Grosvenor Road, S.W.1. Tel.: Victoria 0407.

FOR SALE: Rapier 6-ton Super Petrol/Electric MOBILE CRANE, Diesel conversion available.—WILLIAM G. SEARCH, LTD., Whitehall Road, Leeds, 12. Tel.: 639081 (10 lines).

ALL BUILDERS' PLANT FOR HIRE at competitive prices, including 1,000 Scaffold Boards, Immediate delivery.—M. SANDERS, LTD., 18/20 Medlar Street, London, S.E.5. Tel.: RODney 5143.

FOR SALE OR HIRE: Coles CRANE, 5-ton, Diesel/Electric. Long or short hire. Terms quoted. Also various other plant and machinery: COMPRESSORS, ROLLERS, MIXERS, etc., for SALE. Please inquire. Open weekends.

G. H. DUNNING, Ballards Yard, High Street, Edgware. Telephone: Edgware 2572.

PLANT FOR SALE:

Thornycroft 5-ton Mk.VII Long wheel-base Coles CRANE, new NRG Diesel fitted, reconditioned UD6 International Diesel on generator, electric start. Rope Derrick, £1,000. Insurance certificate in my name and order, £2,650.

Ingersoll-Rand 6-cu. ft. COMPRESSOR, Waukesha Diesel Engine, 315 cu. ft. per min., electric start, mobile, on iron wheels, very good working order, £325.

Onions 6-ton, SCRAPER, in new condition, £265. Mobile Hydraulic BATCHING PLANT, Ford 4D Diesel Engine, on 1200 x 24 tyres. This machine is new and has never been worked, only on demonstration. Offers around £475.

A.C.E. Scwt. HOIST, Lister Twin Diesel Engine (twin flywheel), £75.

Two Stothert and Pitt 10/7 MIXERS, one with Lister Diesel, £115, one with Electric 3-phase Motors, £125.

Rex 10/7, Ruston 1VTH Engine, £125.

Three 4ft. Gln. Roller Pan MORTAR MIXERS, mobile, with Diesel Engines, £125 each; one 3-phase Electric, £145.

C.P.T. MOBILE COMPRESSOR, on pneumatics, 105 cu. ft., Ruston 3VSH Engine, needs attention, £145.

C.P.T. MOBILE COMPRESSOR, on pneumatics, 160 cu. ft., Ruston 3VH Engine, needs attention, £150.

GULLY/CESSPOOL EMPTIER on modern 5-ton Bedford, A Type Eagle tank and pumping gear. Complete with hoses and tools, £585.

Aveling-Barford CAFFERSON, Single-cyl. Petrol Engine, in good working order, £200.

One 14ft. high x 16ft. long 5-ton STEEL GANTRY, complete with block and tackle, £95.

G. H. DUNNING, Ballards Yard, High St., Edgware. Tel.: Edgware 2572. Open week-ends.

FOR SALE:

Caterpillar D7M, with La Plant Choate Hydraulic Angledozer Equipment and P.C.U. Choice of two machines, both recently overhauled. Price from £2,500.

International TD9 TRACTORS, base machines, or with Angledozer Equipment. Price from £450 each.

Fiat 55L TRACTORS, with Hydraulic Angledozer Equipment, in really first-class condition and ready for immediate work. Price from £550.

19RB EXCAVATORS, with Dragline Equipment. Choice of two. Can be seen working locally. Price from £1,250.

International TD9 Hydraulic High Lift SHOVEL, very little used and in absolutely first-class condition. Price £1,600.

MANISTER AND AUGER, LTD., Beehive Works, Baddow Road, Chelmsford. Tel.: Chelmsford 4881, or evenings, Danbury 218.

A.C.E. COMPRESSORS FOR SALE: Two 200 cu. ft. and 240 cu. 4,250 c.f.m. 100 p.s.i. 550-h.p. motor. Broomwide 500 c.f.m., EH251: 400 c.f.m., EH245; 300 c.f.m., EH240; 150 c.f.m., D22A: 100 c.f.m., EP660; also numerous others of all makes and AIR RECEIVERS from 1ft. to 9ft. dia., 100lb. to 1,000lb., w.p.

FRED WATKINS (ENGINEERING), LTD., Coleford, Glos. 'Phone: Coleford 2271/2.

S. LOGGETTS (ENGINEERING) CO., LTD. FOR HIRE, DUMPERS, all sizes. 2 Burton Road, Hampton Hill, Middlesex. Telephone: Teddington Lock 1138/9.

FOR SALE: One late 15A D8 Caterpillar TRACTOR, complete with Birtley Caledonian Equipment. Onions 12/13 cu. ft. Scraper, £1,100, all in A1 condition.—Write Box O.G.393, "The Contract Journal."

FOR SALE: No. 0 Rotosnap ROTARY CRUSHER, including Hammer, Hammer, and Liners, etc. SUTTON STONE CO., LTD., Armthorpe, near Doncaster.

WANTED: Second-hand Onions Model 10 C.C.U. (Scraper Winch) for County Crawler.—NETEN CONSTRUCTION CO., 14 Longsight Lane, Cheadle Hulme, Cheshire. Tel.: Hulme Hall 1906.

FOR HIRE: 15-ton K.N.C. Lorry-mounted CRANE, 70ft. Main Boom, 15ft. Fly. S. BUTTERWORTH, LTD., Winterton Road, Scunthorpe (2097), Lincs.

LOW-LOADER WANTED to carry Priestman Wolf, independent type, with k.o. rear axle. Must be in first-class condition.—State price, type of brakes, etc., to Bux 1198. "The Contract Journal."

FOR SALE: Acrow BAR BENDER (Second-hand), 1953, 380/440-V 3-phase, maximum diameter 2in., minimum diameter 3/8in. Offers, please.—Tel.: MAYRILAND 2660/7734.

ROAD MACHINES Double-bucket SWING WEIGHERS, in excellent order.—W. V. DAVIES, Shipton-on-Stour. 'Phone: 125.

FOR SALE: Jones SUPER 22, good condition.—B.G. PLANT (SALES AGENCY), LTD., Watlington, Oxon 44.

DEEP ROCK DRILLING

Halco Stenwick Drills for 4" or 3 1/2" dia. holes available with skilled operators. Expert advice freely given.

POWER HANDLING LTD., CASTLEFIELD WORKS BINGLEY 4568

GRAYSTONS OFFER FOR SALE:

OP.203—19RB EXCAVATOR, 10700 Series. Skimmer/Backacter Equipment, £1,400.

OP.205—22RB EXCAVATOR, 19800 Series. Face lifter, 20ft. 6in. x 10ft. 6in. 10ft. 6in. Insurance certificate in my name and order, £3,550.

E.105—24RB EXCAVATOR, 7300 Series. Dragline Equipment, £3,200.

E.108—37RB EXCAVATOR, 7300 Series, Dragline Equipment, very good condition, £3,000.

OP.201—NCK304 EXCAVATOR, 1025 Series. Fully equipped, very good condition, £2,650.

Two Stothert and Pitt 10-ton HOOK BLOCK, full set. Weights, powered by Thornycroft NRG Diesel Engine, very good condition, £2,400.

E.108—43RB EXCAVATOR, 19000 Series. F/S Equipment, very good order, £7,200.

E.994—50RB EXCAVATOR, 22000 Series. long and wide tracks, 60ft. Dragline Equipment, 1 1/2 cu. yd. Bucket, worked less than 12 months, excellent condition, £11,200.

E.828—NCK304 EXCAVATOR, Dragline Equipment, 10ft. 6in. Diesel Engine, £2,450.

OP.199—19RB Skimmer/Backacter Equipment, £275.

C.891—Buildmaster TOWER CRANE, Model BDK150, new 1954, 21/2-ton max. capacity, 105ft. height of lift, first-class condition, £1,150.

A.603—Broomwide SVD1 110 c.f.m. Diesel COMPRESSOR, £345.

A.604—Broomwide SVD3 250 c.f.m. Diesel COMPRESSOR, £550.

A.600—C.P.T. 500 c.f.m. COMPRESSOR, Ruston Diesel Engine, £725.

C.P.548—Winger 14/10 MIXER, Closed Drum Diesel, reconditioned, £1,050.

C.P.561—Dalli Hand Scraper WINCHES, £165 each. Several 4in. and 6in. Diaphragm and Centrifugal PUMPS. Diesel, very good condition. Price on application.

C.P.562—4in. S. and P. BATCHING PLANT, with 40-ton Hopper, reconditioned, £1,850.

C.781—Coles 3-ton Diesel/Electric Mobile CRANE, 16ft. Jib, overhauled, £700.

OP.186—Neals MM MOBILE CRANE, Ruston Diesel Engine, Jib up to 35ft. Straight Lattice, good condition, £1,050.

OP.178—Neals M CRANE, powered by J.A.P. Petrol Engine, with 20ft. Lattice Jib, £200.

OP.207—Broomwide SV12 Portable COMPRESSOR, Ruston Diesel, on pneumatics, new 1957, excellent order, £650.

T.104—B.10/7 TRACTOR, with Angledozer, recently fitted new tracks, rollers, etc., £975.

TE.460—3-ton RIPPER, 3-ton model, £365.

D.129—Two Thwaites 1 1/2 cu. yd. DUMPERS, £195

OP.206—10-ton Aveling-Barford ROLLER, Ruston Diesel, Cab, Scarifier, Sprinkler, excellent order, £1,850.

OP.147—3-ton Butters Electric DERRICK, 100ft. Jib, plus 10ft. extension, £800.

C.839—10-ton Butters Steam Derrick, 120ft. Jib, new in 1956, excellent order, £3,350.

OP.148—7/10cwt. Double Barrow Wickham HOISTS, 22ft. 6in. Mobile, £95 each.

PP.47—Woodfield 10-ton RAKING PILE FRAME, with No. 14 Scupper-Hopwood Boiler and 3-ton Double Drum Winch, £1,850.

D.125—Four Euclid Model 27FD Rear DUMP TRUCKS, with Cummins Engines, £1,825 each.

GEN. 1000—10-ton Diesel Dumper, 93 cu. yd. DIESEL GENERATING SETS, complete with all ancillary equipment, in unused condition, £600 each.

A number of Tower Cranes available, various makes and models to cover a comprehensive range.

GRAYSTON PLANT & ENGINEERING CO., LTD., 32 Stewards Road, London, S.W.8. Tel.: Macaulay 6568 (10 lines).

FOR SALE: ERIK TRACTOR, No. 6127T4, with Bucyrus-Erie Bullgrader and P.C.U., price £950.

10RB EXCAVATOR, No. 6403, with Skimmer and Backacter Equipments, price £700.

Apply TILBURY CONSTRUCTION CO., LTD., Ruscombe Works, Twyford, Berks.

Tel.: Twyford 177 (four lines).

FOR SALE: 10 Stothert and Pitt 10/7 Petrol-in Diesel CONCRETE MIXERS, in excellent condition.

Admiralty, £75 each.—L. W. VASS, LTD., Ampthill, Bedford. Telephone: Ampthill 3255.

WANTED: PONTOONS, ex W.D., suitable for mounting small Crane. State price, condition, and where lying.—Write Box P.1214, "The Contract Journal."

DROTT SKID SHOVEL BT6, fitted with Boughton Winch, for HIRE at keenest rate.—JAMES COOPER, LTD., 28 Kensington Church Street, London, W.8. Tel.: Western 2342.

AVAILABLE for HIRE and CONTRACT: D9 and D8 TRACTORS, with Blade or Scraper.—ELLIOTT, Wetherby Road, York. Telephone: 78220 and 78501.

HOIST, A.C.E. Comet Junior, pneumatics, Petter Diesel.—GORE, 12 Tavistock Road, E.18. WANstead 1909.

FOR SALE

Lima 2400 EXCAVATORS, with Dragline and Forward Shovel. Choice of four.

Marion 111M EXCAVATORS. Choice of two.

Lima 1201 EXCAVATORS. Choice of two.

Ruston 1000 EXCAVATOR, Diesel/Electric.

All machines in excellent condition, may be seen working, and are open to any inspection and trial.

Immediate delivery.

Call, write or 'phone:

A.R.C. MOTOR CO., LTD., Redhill Works, Arnold, Nottingham. Tel. 26-3331/5.

CAMBRIDGE

HIRE—SALES—SERVICE

MOSS
CAMBRIDGE LTD.

Modern Diesel

COMPRESSORS

EXCAVATORS

TRENCHERS

BULLDOZERS

146 HILLS ROAD, CAMBRIDGE. Phone: 87519

Modern Diesel

ROLLERS

DUMPERS

MIXERS

PUMPS, ETC.

PLANT AND MACHINERY WANTED—FOR SALE—FOR HIRE

AIDU (note change of address) offers for **SALE**: One Jones KL22 3-ton Diesel driven MOBILE CRANE, Ruston Diesel Engine, 24ft. Lattice Jib, £750. One Jones Super 40 3-ton Diesel driven MOBILE CRANE, on tracks, 30ft. or 40ft. Jibs, New 1947. Overhauled, £1,325. One Jones KL44 4-ton Diesel driven MOBILE CRANE, on tracks, 30ft. Jib, New 1949, £1,225. One Ransomes and Rapier 462 1½ cu. yd. Diesel driven EXCAVATOR Face Shovel Equipment. New 1954. In excellent condition, £4,750.

AIDU EQUIPMENT CO., LTD., 105-125 Markfield Road, Tattenham, N.15. Telephone: TOTtenham 0401 (10 lines).

FOR IMMEDIATE HIRE: Deemas Diesel PILE HAMMERS, DS, D12 and D22, 20-ton PORTASILO. Spencer-Hopwood BOILERS, all sizes. KL44 MOBILE CRANE, pneumatics, Jibs up to 50ft. McKiernan-Terry PILING HAMMERS, S, 6, 7 and 983. 3½-ton Vibro-Venker Trailer Type VIBRATING ROLLER. Zenith PILE EXTRACTORS, Nos. 20 and 50. Larsen Nos. 2 and 3 Sections STEEL SHEET PILES. Johnson 1 cu. yd. and 1½ cu. yd. Diesel DUMPERS, 3½yd. Weatherill LOADING SHOVEL. DUDLEY VALE LTD., 3 Buckingham Place, London, S.W.1. VICtoria 0252.

FOR SALE: Hercules 8 BRICKMAKING PRESS, made by Herbert Alexander, Ltd. In 1951, approx. cost £2,500, Serial No. 2092, output 1,200 bricks per hour, price £670 net.

DUNBRICK MACHINES output 1,800 bricks per hour, made by 80 steel Stillage Racks and 8,000 steel 3-brick Pallets, each rack takes 132 pallets (396 bricks), price £550 the lot.

BATHCRETE LTD., Cotswood Works, Standlake, near Witney, Oxon.

FOR HIRE: EXCAVATORS, 3½ and 1½ cu. yd., all equipments. TRACTORS, TD9, TD18, D6, D7, with Dozers and Scrapers.

DUMPERS and TIPPING WAGONS; COMPRESSORS; ROAD ROLLERS; CONCRETE MIXERS, etc.

All with experienced operators.

BLACKPOOL PLANT HIRE, LTD., Holyoake Avenue, Blackpool. North Shore 51067-8.

FOR HIRE: Drott TRACTOR SHOVELS, F with 4-in. Equipment, BTD6, Angle-dozers, Tippers. Let us quote you for EARTHMOVING, SITE CLEARANCE, EXCAVATION, etc.—WANTZ PLANT HIRE, LTD., 87 Glenny Road, Barking, Essex. 'Phone: Rippleway 1725. Rainham, Essex, 3844 and 3832.

FOR HIRE—Available immediate, 1201 LIMA, fitted with genuine American 100ft. Crane Boom, Back Haul Gear, Bridle, etc., and in first-class condition.—PLANT SALES LTD., 29 Castlereagh St., London, W.1. Telephone: Paddington 2663/5.

SURPLUS PLANT (all types) and MATERIALS regularly PURCHASED in small or large parcels. Rapid payment or prompt payment. H. J. CHURCH AND CO. (EDMONTON), LTD., 68-70 Paddington Road, South Norwood, S.E.25. Tel.: SYDenham 3131-3.

WANTED, CONCRETE MIXERS, 10/7 capacity, Our Drott Diesel Petrol Engines, new condition only considered.—Wright ARTIFICIAL STONE AND CONCRETE CO., LTD., The Old Brickworks, Harold Wood, Essex.

WANTED, Reconditioned, or similar, HYDRAULIC EQUIPMENT, with Angle-dozers, for Series SR Caterpillar D6. Give full details.—J. MAULDERS AND SONS, LTD., 554 Barton Road, Stretford, Lancs. Tel.: URMston 3266.

ELLIOT BROS. (WORTLEY), LTD. 1957 County CRAWLER, with latest type Internal Arm Bulldozer and Winch and 4yd. Scraper, perfect and working order, £1,300.

10RB EXCAVATOR, 8500 Series, 8yd. Engine, electric start, property from new of small Yorks. Town Council, Skimmer and Backacter or Crowd Shovel, a specimen machine, Crowd Shovel never been fitted with new, £1,000.

Smith 312 Blackstone Diesel, Crawler-rigged and with Generator and Mower for scrap loading, £650. Smith 2/10, Fowler Diesel, choice of two, fully conditioned, any one equipment, £570.

N.C.H. latest of this type, with Crowd Shovel or any other equipment, engine by Pelepon Diesels and modern cab, ready to work, £600.

Barford-Perkins ROLLER, 8/10-ton, ballast wheels, Albion Petrol Engine, narrow rear wheels, suitable pitching and trench reinstatement, Sprinklers, £600. **SMITH 2/10 EQUIPMENTS:**

One Fowler 2-cyl. ENGINE, reconditioned and with new cylinder, £130.

One Lattice Dredging JIB, FAIRLEAD and 3½yd. BUCKET, £150.

One Universal JIB and FORWARD SHOVEL, £120.

One BACKACTER ARM and BUCKET, £65.

One FORWARD SHOVEL, BUCKET and ARMS, £60.

N.C.H. EQUIPMENTS:

One FACE SHOVEL, Chain Guard, £130.

One BACKACTER BOOM, ARMS and SHOVEL, £130.

One DRAGLINE JIB, FAIRLEAD and 3½yd. BUCKET, £130.

One Skimmer BUCKET and BOOM, £100.

TRACKS, TRUCK FRAMES and every SPARE for Chrysler DIESEL ENGINE, 6-cyl., power pack on bedplate with vee rope drive, brand new in crate, £100. high-pressure pump, brand new in crate, £100. Chrysler Diesel Engine, suitable SPARES for above, £70.

One Opperman MOTOCART, £100.

One Butters 2-ton Hand CRANE, 35ft. Steel Jib, Guys and Ground Stays, £60.

One Kyres Diaphragm PUMP, £40.

One Ingersoll-Rand PORTAL COMPRESSOR, 110ft. per min. standard electric conversion, £35.

One Air Pumps Datto, £35.

General-purpose 2-wheel TRAILER, 1200 x 20 tyres, £70.

Three-wheel TRAILER, front castor, suitable Bristol Dozer, etc., as new, £80.

New 10-ton Drott Angle-dumper HOUSING, armoured inside and out, heavy gunmetal knock-on connectors, screwed 3in. Iron, all threads are preserved by aluminium blanking plugs, £5 each.

Glen Works, Deepcar, near Sheffield. (Tel.: Stocksbridge 3276.)

Deepcar is six miles west of Sheffield, on A616 (Woodhead Road).

THE UNUSUAL PLANT SERVICE:

We claim to have the most comprehensive PLANT HIRE SERVICE in this country, and can obtain from our extensive stock the builder requiring from a drain plough to an excavator. Our lorries deliver in the London area every day. Note the telephone No.: Brentwood 2116.—SYMES (PLANT), LTD., Ongar Road, Brentwood, Essex.

PLANT HIRE: Earthmoving, Site Clearance, Excavations for Roads, etc.

DOUGLAS HAMILTON, LTD., Tunbridge Wells. Telephone: Southborough 1538.

URGENTLY REQUIRED, SHEET STEEL PILING, in any length and section considered.—Write Box C.C.366, "The Contract Journal."

WANTED, 20-ton Blaw Knox SUPERSILO.—LANE BROTHERS (MANSFIELD), LTD., Contractors, Mansfield.

NEAGRON (CONSTRUCTION), LTD. OFFER FOR SALE:

SILVER KNIGHT 4-berth CARAVANS, 15ft. 6in. long x 6ft. 9in. wide, height 6ft. 6in., all necessary fittings, little used and in perfect condition.

JOHNSON Type MA 36ft. CENTRES PORTABLE CONVEYOR, 24in. Belt, Diesel Engine, pneumatic road wheels, little used, new 1955.

C.P.T. 315, Caterpillar 4T Diesel Engine, new 1955. NEALS NM2 2-ton MOBILE CRANE, 25ft. Straight Lattice Jib and 10ft. Insert, Ruston 2VTO Diesel Engine, pneumatic tyres, very good condition, new 1943.

NEALS NM2 2-ton MOBILE CRANES, 30ft. Lattice Jibs, Ruston 2VTH Diesel Engines, crawler-mounted, very good condition, new 1951.

MICHIGAN C16 ½ cu. yd. EXCAVATOR, rigged as crawler, 45ft. Jib and new Wylie Visual and Audible Indicators, M. Diesel Engine, very good condition, new 1947.

LIMA 802 2½ cu. yd. EXCAVATOR, Jibs up to 90ft. and Back Hitch, General Motors 6-cyl. Diesel Engine, very good condition.

MORGAN 10-ton Electric DERRICK CRANE, 120ft. Jib, 20-ton motor, 20-ton Dumper, 10-ton Dumper Boggies, very good condition, new 1954.

MORGAN 15-ton Electric DERRICK CRANE, 120ft. Jib, not worked since April, 1959, well maintained, new 1956.

SMITH 5-ton Steam Loco. CRANES, 35ft. or 40ft. Jibs, Single Drum machines, 4ft. 8½in. gauge, completely reconditioned, really first-class condition.

STOTHERT AND PITT 30cwt. PORTAL CRANE, 400/3/50 Electric, very little used, new 1955.

10RB ½ cu. yd. EXCAVATOR, Skimmer and Backacter Equiment, 18in. and 30in. buckets, Ruston SYCEN Diesel Engine, excellent condition, new 1958.

19RB ½ cu. yd. EXCAVATOR, Drapline, Skimmer and Backacter equipments, Ruston Diesel Engine, good working order, new 1958.

Approx. 8,000 cu. ft. of BAULK TIMBERS, 12in. x 12in. x 12in. x 6in., 10in. x 10in., 9in. x 9in. First-class condition.

ACROW FLOOR CENTRES, Nos. 1, 2, 3 and 4. Acid tank cleaned and in really first-class cond.

THWATES ½ cu. yd. DUMPERS, Petter AVA2 Diesel Engines, pneumatic tyres. Very good condition, New 1956.

J.C.B. DIGGER, 24in. Bucket and Forward Shovel, mounted Fordson Major Tractor, Mark 1 Series. New 1955.

WINGET 14½ cu. ft. CONCRETE MIXERS, Models TONY Petter AVA2 Diesel Engines. Very good condition, New 1956.

BLAW KNOX Cleaning 21/14 High Discharge MIXERS, Integral Weighgears, Ruston 2V Diesel Engines. New 1957.

SYKES 6in. CENTRIFICAL PUMPS, Models SP86, Ruston 2VH Diesel Engines, steel road wheels. First-class condition, New 1951.

CHASESIDES ½ cu. yd. LOADING SHOVELS, Perkins P6 Diesel Engines. New 1950 and 1951.

BARBER-GREENE Junior FINISHER, Perkins P6 Diesel Engine. Very good condition, New 1953.

INTERNATIONAL DROTT BK3 TRACTOR SHOVEL, 1 cu. yd. Bucket. Excellent condition. New 1958.

CATERPILLAR D6 TRACTORS, 15A Series, Hydraulic Dozers and Winches. Very good condition.

WINGET-PARSONS 25ft. TRENCHER, 15in. and 24in. Picket Lines. Dorman 4D10 Diesel Engine. First-class condition, very little used. New 1950.

EXCAVATOR EQUIPMENTS, CRANE JIBS and SECTIONS ex stock, or FABRICATED to ORDER, LONDON DEPOT.

FURTHER DETAILS: Abbey House, Victoria Street, London, S.W.1. Telephone: ABBey 5152 (4 lines).

WANTED to HIRE, SIX CATERPILLAR DW25. Must be in first-class condition. Essex area. Please forward rates, etc., to SMITH BOOTH, LTD., Perrymount Chambers, Haywards Heath, Sussex. Tel.: Haywards Heath 1126.

WANTED, Gravel Pit Machinery: TROUGHED BELT CONVEYOR, 40ft. centres, 24in. belt; STORAGE BINS, Hydraulic LOADING SHOVEL, — STOW BARDOLPH GRAVEL CO., LTD., Lynn Road, Saddlebow, King's Lynn, Norfolk.

HOLE & SON (SAYERS COMMON) LTD. Head Office - - - Sayers Common, Hasocks, Sussex. **HEAVY HAULAGE CONTRACTORS** **LOW-LOADERS** and **HYDRAULIC TIPPERS** **FOR HIRE**

Telephone - - - HURSTPIERPOINT 2279 & 2333

FOR SALE Two Fowler Challenger III Tractors with P.C.U.'s "as is"—£240 each.

THOMAS BOW, Lamartine Street, Nottingham. Tel: 51701 (3 lines).

There is no better medium than

THE CONTRACT JOURNAL

for small classified advertisements

Telephone for

LINEAGE RATES to

WATERLOO 3411



BT6, fitted with hydraulic bullgrader equipment. Very good condition. Choice from	£850
BT6, fitted with Drott B6K3 and 1 cu. yd. standard bucket, first-class condition	£2,250
BT6, fitted with Drott B6K3 and 1 cu. yd. standard bucket, new January 1959	£2,600
Bray LOADER, Model BL30, hydraulic steering. Good working order	£1,300
TD9 TRACTOR, fitted hydraulic angle dozing equipment, repaired where necessary and resprayed	£800
Chaseside LOADER	£975
Conder hydraulically operated 4yd. SCRAPER, previously used with Fordson County Crawler, excellent condition	£350
David Brown CRAWLER, with Blaw Knox dozer equipment and cab	£550
Caterpillar D.4, 2T Serial, fitted with La Plant Choate dozing equipment	£550
Ruston S.67 6yd. SCRAPER, excellent condition	£600

SAVILLE (TRACTORS) LIMITED

HARVESTER HOUSE
STRATFORD-UPON-AVON
Tel. 4242 (15 lines)



To hire a HYDRA-DIGGA/LOADALL 65

contact any of the following...

20th CENTURY EQUIPMENT COMPANY (LONDON) LTD.

Phone: Cunningham 0291

GRAVESEND PLANT HIRE LTD.
115 DOVER ROAD
NORTHFLEET, KENT
Phone: Gravesend 3574 & 6002

WARRINER (BUILDERS) LTD.
149 NORTH STREET
ROMFORD, ESSEX
Phone: Romford 45851

PLANT HIRE (GROVE) LTD.
6-7 CHURCH STREET
WANTAGE, BERKS.
Phone: Wantage 438

K. WAGER & COMPANY LTD.
PLANT HIRE
RUSH GREEN, HERTFORD
Phone: Hertford 2899 & Ware 661

BARRIE A. HILL & CO.
PLANT HIRE, 'PARKLANDS'
FOREST GREEN, DORKING, SURREY
Phone: Forest Green 219

DOUGLAS-HAMILTON (CONTRS) LTD.
NORTH FARM ROAD
TUNBRIDGE WELLS, KENT
Phone: Southborough 1538

W. BIRD, PLANT HIRE
NEW BROAD VIEW FARM
BEDFONT RD., STANWELL, MIDDX.
Phone: Feltham 2364 & 3572

E. R. S. FOSTER, CONTRACTORS
58 CROWN HILL,
RAYLEIGH, ESSEX
Phone: Rayleigh 1211 & 1333

PARDIX PLANT ENGINEERS LTD. (ALL CONTRACTORS' PLANT)

Phone: Waltham Cross 23496 & 24913

R. A. WOOFF (PLANT HIRE) LTD.
Phone: Wokingham 413 or 1245

HAILSHAM PLANT HIRE LTD.
(WALTER SMITH), MARKET STREET
HAILSHAM, SUSSEX
Phone: Hailsham 265, Eastbourne 5822

MERCANTILE MACHINERY
(PLANT) LTD.
39 HIGHFIELD ROAD, DARTFORD
Phone: Dartford 3993

NORMAN HILL, PLANT HIRE
174 TWICKENHAM ROAD
ISLEWORTH, MIDDX.
Phone: Isleworth 8981

G. R. NIXEY LIMITED
WHEATLEY, OXFORDSHIRE
Phone: Wheatley 386

ALDERMAN & SONS LTD.
61 HIGH STREET, WHITCHURCH
NR. AYLESBURY, BUCKS.
Phone: Whitchurch 288

GEORGE FIELD, PLANT HIRE
EXCAVATION & DEMOLITION
CONTRACTORS
CHADWICK ROAD, LONDON, S.E.15
Phone: 7570, New X 6236

HEAVERS PLANT HIRE (CHICHESTER) LTD.

Phone: Chichester 2929
Ashford, Middx. 3070

SPENCER KING LTD.
LAMBERHURST FARM, DARGATE
FAVERSHAM, KENT
Phone: Boughton 335

COOMBE SIDE CONSTRUCTION
CO. LTD.
38 SHEEP LANE, LONDON, E.8
Phone: Clissold 9179

A. J. PHILLIPS LIMITED
PLANT HIRERS, LONDON, N.W.6
Phone: Maida Vale 3406/2055/4807

T. H. ROBERTS LIMITED
EARTH MOVING CONTRACTORS
OUTWOOD, NR. REDHILL, SURREY
Phone: Smallfield 118 & 073

BARKING DEVELOPMENTS CO. LTD.
HIGHBRIDGE ROAD
BARKING, ESSEX
Phone: Rippleway 2408

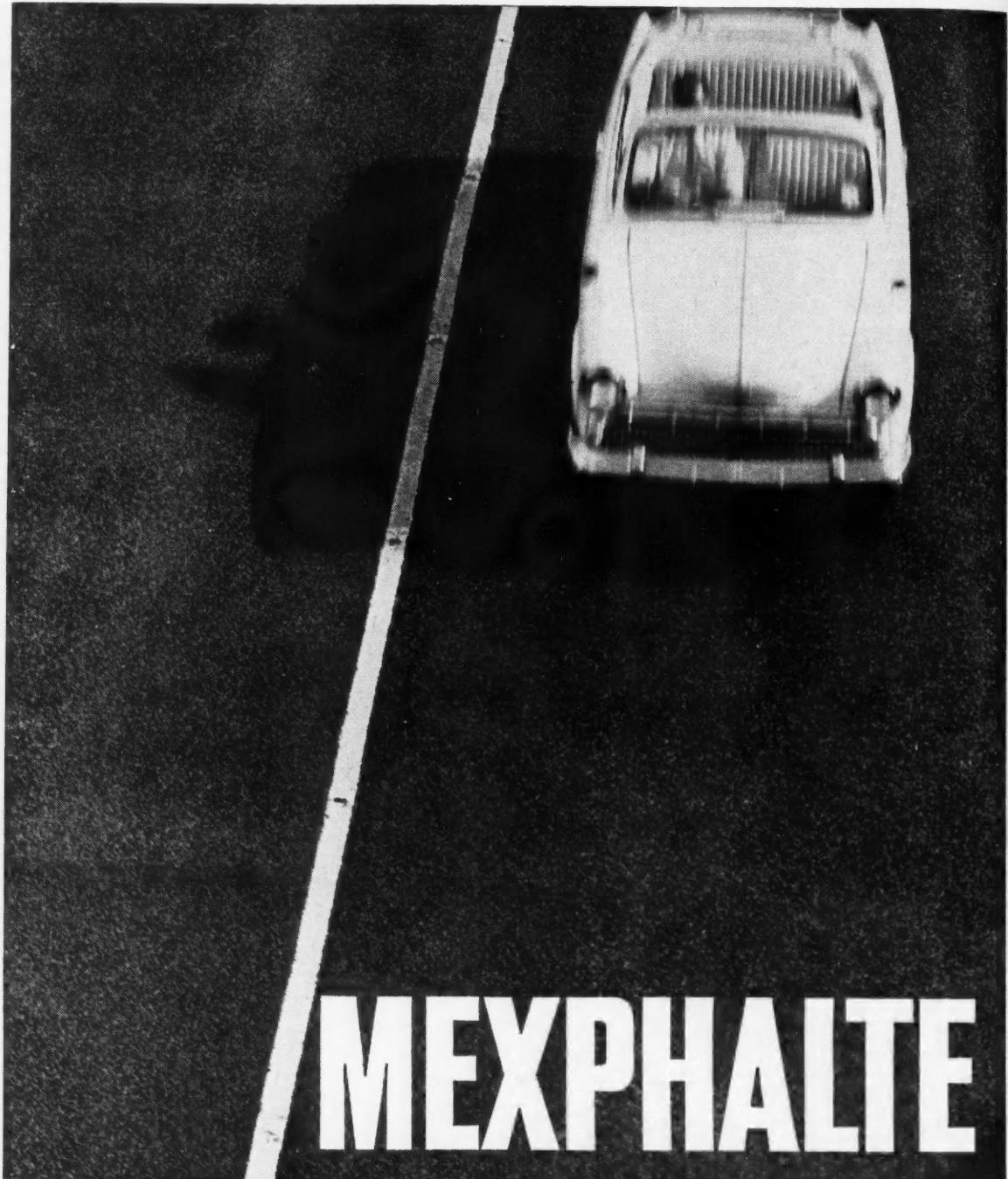


Issued by

H. J. T. Doe
AND SONS LTD.

ULTING-MALDON-ESSEX Tel: Hatfield Peverel 311 (Night 319)

Sole Distributors in :- NORFOLK, SUFFOLK, HUNTINGDONSHIRE, CAMBRIDGESHIRE, BEDFORDSHIRE
HERTFORDSHIRE, ESSEX, MIDDLESEX, LONDON, SURREY, E. SUSSEX, KENT



MEXPHALTE SHELPHALT

For roads MEXPHALTE and SHELPHALT

SHELL-MEX AND B.P. LTD. Registered Users of Trade Marks

Distributors in the United Kingdom for the Shell, BP and Eagle Groups





"U" FOR UTILITY

The Electrically welded "U" shaped 14 cub. yard Pilot Steel body fitted to a Ford Trader Chassis with an All-Wheel-Drive Conversion and operated by Standard Pilot OV.4 Cab-controlled Tipping Gear makes this the all-purpose Tipper favoured by many well-known Contractors such as Messrs. George Wimpey & Co. Ltd., who need a reliable, efficient and smooth operating vehicle adaptable to their many requirements.

That is why they Invest in Pilot Power

Bodywork to Standard or Individual requirements can be supplied in Alloy, Steel or Wood

PILOT WORKS LTD.,
Manchester Road, Bolton.
Tel: Bolton 5545

PILOT *Hydraulic
Tipping Gear*

LONDON OFFICE:
3 Southampton Place, W.C.1
Tel: CHancery 5130

HIRE
from
ARUPS

- 5-25 Tons capacity • Jibs up to 120' with 15' to 30' flying jibs
- also all sizes mobile cranes on pneumatics or tracked

GERRARD 2708
5 LINES

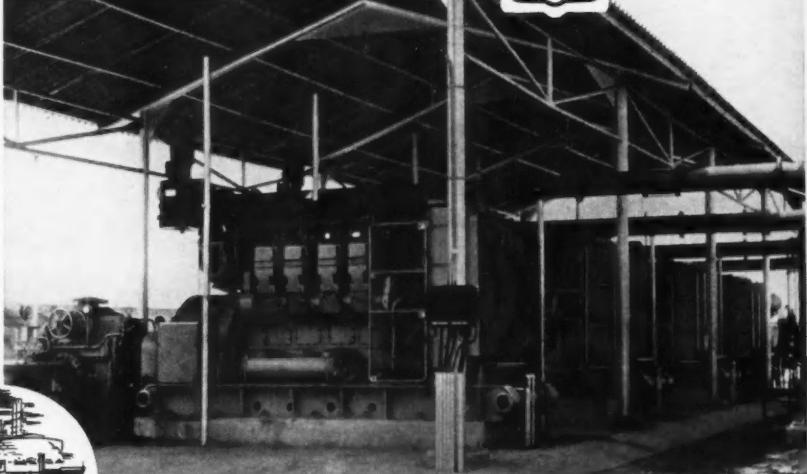
25-ton Coles model 3010

15-ton NCK lorry-mounted crane

ARUP & ARUP LTD., COLQUHOUN HOUSE, BROADWICK STREET, LONDON, W.1.

Packaged pumping power for 

Four 'ENGLISH ELECTRIC' 8SV diesel engine package sets are on duty at the Puerto Miranda loading terminal of Cia. Shell de Venezuela Ltd. These sets, each with a continuous site output of 655 b.h.p. at 720 r.p.m., drive positive displacement pumps through hydraulic couplings to deliver the crude oil to tankers. The speed of the pumps can be varied between 290 and 720 r.p.m.




'ENGLISH ELECTRIC'
diesel engines

THE ENGLISH ELECTRIC COMPANY LIMITED, MARCONI HOUSE, STRAND, LONDON, W.C.2
Diesel Engine Division, Brownsover Hall, Rugby. Telephone: Rugby 3391

DE.97 WORKS: STAFFORD · PRESTON · RUGBY · BRADFORD · LIVERPOOL · ACCRINGTON



TWO NEW MOBILE COMPRESSORS

AIR COOLED — JENBACH JW 220 having a capacity of 78 c.f.m.

HIGHER CAPACITY — JENBACH JW 440 having a capacity of 156 c.f.m.

These models are offered in addition to the JW 78 water cooled machine already accepted by contractors and such public authorities as Worcestershire County Council.

FOR
SALE

CRANES UP TO 25 TONS CAPACITY, EXCAVATORS, BULLDOZERS OR PUMPS ETC.

For details of the most advanced compressors available in Britain today, whether you wish to hire or purchase new or secondhand plant, write to:—

OR
HIRE

CHAMBERLAIN PLANT LTD.

(One of the Chamberlain Group of Companies)

CROWN WORKS • SOUTHBURY ROAD • ENFIELD • MIDDLESEX

TELEPHONE HOWARD 4994

Jenbach Compressors



Earthborers



Concrete Equipment



Staffa Cranes



Excavators



Tower Cranes



WILMOT BREEDEN

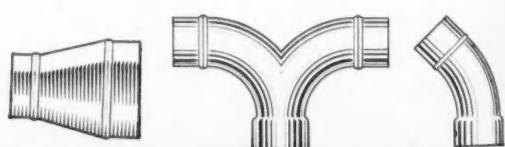


Smooth the way...

... with VELFLO — the first mass-produced circular duct fittings to be manufactured in the United Kingdom.

The VELFLO fittings are ideally suited for high velocity air conditioning ductwork. They can also be used with advantage for dust and fume extraction plant, low velocity air conditioning systems and rain and waste water piping installations.

Because VELFLO fittings are all-welded they are airtight throughout ; because VELFLO fittings are machine-made and precision-formed the flow path is smooth and unimpeded by any surface defects, flow resistance and noise are reduced to a minimum, and uniformity and economy are assured.



...with

VELFLO



Type 7/5

..are better than one..

The trouble with one-wheel barrows is their balance—or lack of it. They tip... usually in the wrong places.

They also spill... meaning you half-fill them, getting only half your money's worth. Worst of all, they take so much 'beef' to lift... they leave nothing for pushing or loading! YES, WHEELBARROWS ARE OUT—you need something more profitable. Dumpers, maybe? Fine—except for

the old running-cost-bogey; even a small dumper can eat through profits... especially on a smaller contract.

But there *must* be an answer. What is it?

Of course: DOBBINS **William Jones' DOBBINS**—that's the answer!

The **DOBBIN**

(Regd. Trade Mark)

is manufactured by

William Jones Ltd.

Adam House, 1 Fitzroy Square, London, W.1

Telephone: EUSton 7871
(7 lines)



..cheaper than four

DOBBINS TIP EASILY;

 the skip throws itself forward emptying every grain first-time, **BUT...**

...not before you're ready!

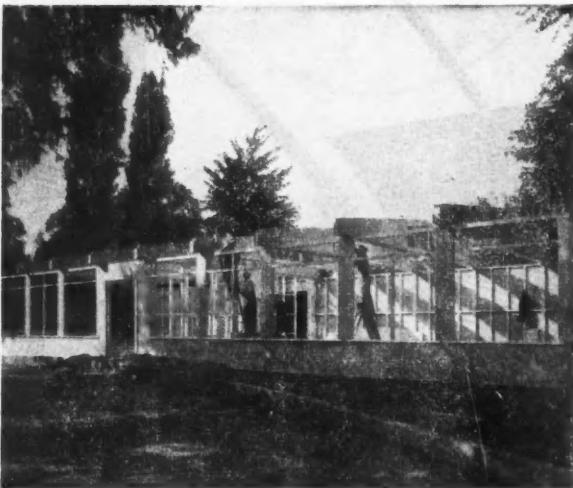
(you can also *partially* empty a load without losing control). And DOBBINS are very much easier and *f-a-s-t-e-r* to push... taper, roller, or ball-bearings, plus two-wheel stability, see to that. So when you think about ordering barrows—think of DOBBINS *first*. Then think how DOBBINS *last*. (For years.)



Types 10/7 and 14/10

PRICES & SPECIFICATIONS:

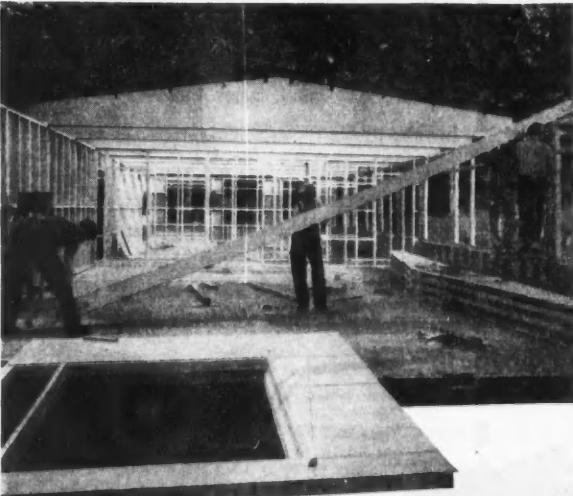
Type 7/5 with 16 x 4 cushion tyres	£16 15s. 0d.
Type 7/5 with 20 x 3 pneumatic tyres	£18 18s. 0d.
Type 10/7 with Rickshaw-type handle & 400 x 17 pneumatic tyres	£27 15s. 0d.
Type 14/10 with Rickshaw-type handle & 400 x 17 pneumatic tyres	£28 0s. 0d.



GRENVILLE COLLEGE a new private school in Suffolk (shown here under construction) was prefabricated by D. McMaster (Bures) Ltd., and Canadian fir plywood building components were erected on the site in 6 days.

prefabrication with Canadian fir plywood

Prefabrication of school building components is one place where Canadian fir plywood cuts costs. Canadian fir plywood—a grade to suit any job—is structurally strong, light, easy-to-handle without breakage, and permanently bonded with waterproof glue. Prefabricated building components, made with low cost Canadian fir plywood, save the manufacturer money on material, labour and transport. Ask your timber & plywood supplier about prices.



CANADIAN DOUGLAS FIR PLYWOOD

For free technical data on fir plywood prefabrication write to:-
PLYWOOD MANUFACTURERS ASSOCIATION OF BRITISH COLUMBIA
WHEATSHEAF HOUSE, 4 CARMELITE STREET, LONDON, E.C.4.

FIR PLYWOOD MARKED **PMBC EXTERIOR** HAS WATERPROOF GLUE

59-20

EXCAVATORS

TRACTORS

TRAXCAVATORS

LOADING
SHOVELS

COMPRESSORS

DUMPERS

MIXERS

Tel.
RODNEY
2215

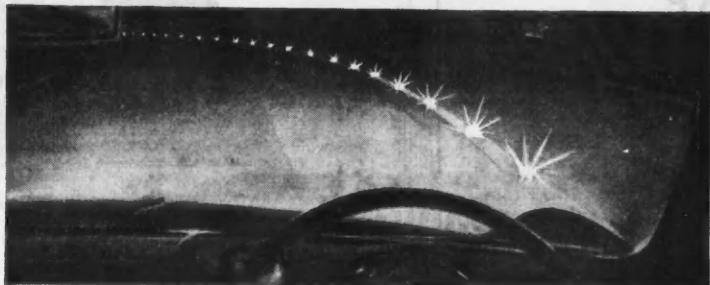
**The hire service
that never lets
you down**

COX OF CAMBERWELL

H. COX & SONS (PLANT HIRE) LTD.

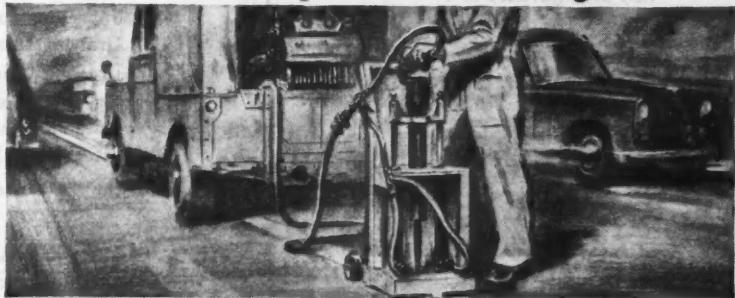
33 Southampton Way, Camberwell, London, S.E.5.

IF YOU WANT...



At night or in fog, all drivers need the safety offered by Gydelite Road Reflector Studs

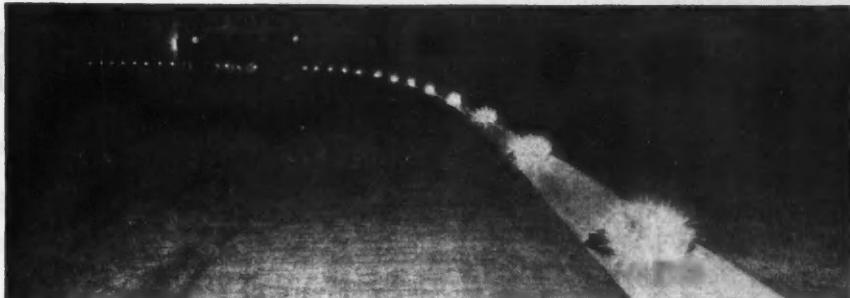
complete safety...



Installation is simplicity itself, while the road is kept open

at low cost...with

An installation Service System is available at remarkably low cost. Details gladly sent on request.



These new 'GYDELITES' are the real answer to safe night driving. For installation, reflective power and cheapness, Gydelite Road Reflector Studs are the answer to your road problems. Use these revolutionary new Reflector Studs on your roads. Install 'GYDELITES' and take the danger out of darkness...they are guaranteed for two years. Servicing costs virtually nil.

no maintenance charges, equip your roads with

GARRINGTONS

GYDELITE
ROAD REFLECTOR STUDS

GARRINGTONS OF BROMSGROVE WORCESTERSHIRE TELEPHONE 2621 TELEX 33269

**BUILDING PLANT
AND
ELECTRIC TOOL
HIRE**

E. R. COLE LTD.

ANNOUNCE
THE OPENING OF A BRANCH DEPOT

AT

**ARCH 14, KINGSTON WHARF
SHOREHAM-ON-SEA**

Tel: SHOREHAM 3947

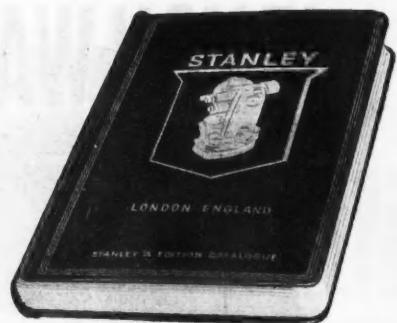
A complete range of portable electric tools is available for Hire or Sale and a nucleus of Building Plant, including Vibrating Rollers is held for Hire only.

E. R. COLE LTD.

Coombe Road, Neasden Lane, London, N.W.10

Tel: DOLLIS HILL 6606

Your guarantee of satisfaction



Always refer to the

STANLEY

"A" EDITION CATALOGUE

The 'Stanley' range comprises all that is best in:-

Surveying Instruments and Equipment

Drawing Instruments

Drawing Office Equipment

Drafting Machines Drawing Scales

Mathematical Instruments:— Planimeters, Integrators, Integrographs, Harmonic Analysers

Copies of the "A" Catalogue will be sent on request (CJ.A1)

W. F. STANLEY & Co. Limited

New Eltham • London, S.E.9

Phone: Eltham 3836 Grams: "Turnstile" Souphone, London



The MULTIBLOC MINOR is illustrated above
PRICE (with 4" equipment) . . . £326 ex works

PLENTY OF BLOCKS

and bricks as and when wanted are assured to the user of a British-made MULTIBLOC machine. It can be used in your yard or actually on the site. No pallets are used and most types of solid and cavity blocks and bricks can be made. There are machines for all output requirements from a few hundred to many thousands of blocks per day.

Telephone:
BRISTOL 38418 (3 lines)

ALAN R. DAVIES
L I M I T E D

20 WHITELADIES ROAD
BRISTOL 8

FOR BLOCK MAKING AND HANDLING EQUIPMENT



The reinforcement fabric used in the Massey-Harris Ferguson factory at Stretford was supplied by Richard Hill. Do you need reinforcements? Then call up the Maxweld man! He can give you all the facts on the type and quantity of fabric you'll need plus a rough idea of the cost. And he's backed by the

Richard Hill Design Service

who can then draw up more detailed plans and estimates. You can get him at Middlesbrough (2206), London (Mayfair 3538), Birmingham (Mid. 5625), Manchester (Central 1652), Leeds (2-7540), Bristol (24977), Glasgow (Central 2179), Nottingham (Bulwell 27-8383), Bournemouth (Westbourne 63491), Cardiff (46552), Belfast (29126).

Maxweld fabric

is manufactured by RICHARD HILL LIMITED (Established 1868)

Newport Wire and Rolling Mills, Middlesbrough, Yorkshire. Tel: Middlesbrough 2206

A MEMBER OF THE FIRTH CLEVELAND GROUP



EAR^H BY CONTRACT

YARDAGE BASIS.
PLANT HIRE WITH OPERATORS

MOVING

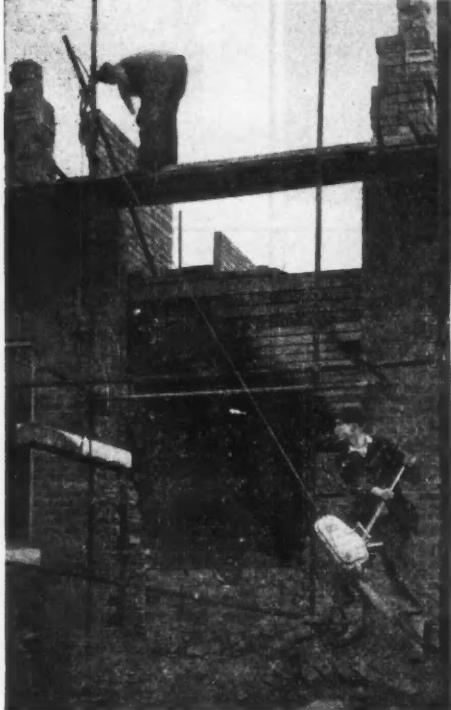
SUB-CONTRACT

LIMAS 1201 DRAGLINE WITH FACE SHOVEL EQUIPMENT TD24.
20 & 18 BULLDOZERS

D TYPE TOURNAPULLS—54, 22 & 19RB EXCAVATORS WITH FACE SHOVEL EQUIPMENT

D8 TRACTORS & SCRAPERS & SUITABLE BULLDOZER EQUIPMENT

W. J. SIMMS, SONS & COOKE LTD., EXCAVATION DEPT., HAYDN ROAD, NOTTINGHAM
CABLES CONTRACTS.



CUT BUILDING COSTS
with the
TIRFOR
LIFTING RANGE 1-12 TONS
(Increase capacity with SnatchBlocks)

A combination of winch and lifting tackle
- with any height of lift

- ▶ Loading plant on to vehicles
- ▶ Demolition and tree felling
- ▶ Moving bogged vehicles
- ▶ All hoisting or dragging jobs
- ▶ Operated and carried by one man
- ▶ Over 100,000 in use

TIRFOR LIMITED
ONE OF THE SIMM ENGINEERING GROUP

27, BROOMGROVE ROAD, SHEFFIELD, 10.
London Office: 33 ST. GEORGE'S DRIVE, S.W.1.

Telephone: 64436.
Tel: TATE 8772.



WALPAMUR PAINTS do a wonderful job

Beautiful colours... lasting perfection of finish... for inside and outside use... Walpamur Quality Paints do a wonderful job. Constant laboratory testing at every stage of manufacture ensures the consistently high quality on which is based the international reputation of these famous paints.

DURADIO 5-YEAR ENAMEL PAINT is unsurpassed for interior and exterior decoration.

WALPAMUR WATER PAINT is ideal for walls and ceilings: a special Exterior Quality is also available.

DARWEN SATIN FINISH for inside use only is attractive in any room and perfect for use in humid atmospheres.



For further details of these and other Walpamur products write to The Walpamur Co. Ltd., Darwen, Lancs.

THE WALPAMUR CO LTD · DARWEN & LONDON
Paints, Enamels and Varnishes for every possible need





TAKE
THE ROUGH
SMOOTHLY
IN A
LINER
'Roughrider'
REGD.

15 or 22½ cwt. DIESEL DUMPER

*The dumper that brilliant engineering
produced for you!*



THESE POINTS MAKE IT THE BEST OF ALL . . .

- Propeller shaft not needing lubrication.
- P.R.M. constant mesh change-on-move gear-box with three forward and reverse speeds.
- Small turning circle makes it the ideal machine for narrow roads.
- All-in-line transmission without belts or chains.
- Height of skip gives easy loading from the mixer.
- Low centre of gravity enables the Roughrider to operate under extremely adverse conditions.
- Guards protect driver and working parts.
- Fully floating rear axle.
- Patented two-position skip.

HIRE PURCHASE TERMS ONLY 10% DEPOSIT

THE LINER CONCRETE MACHINERY CO. LTD.
342, PARK ROAD, GATESHEAD, S. Phone: 72501. Grams: 'Liner, Gateshead'
London Office and Showrooms: Liner House, Lexden Road, Acton, W.3.
Phone: ACORN 6931

Also at Birmingham, Manchester, Liverpool, Bristol,
Leeds, Grantham, Accrington, Torquay, Glasgow, Dundee, Belfast, etc.

Please send full details of the Liner 'Roughrider'	
NAME	_____
ADDRESS	_____

362



Time
mattered
little in
Grandpa's day...
...but **NOW**....
there's

BURN BROS
(London) Ltd.

for Fast deliveries
of CAST IRON
SANITARY WARE, RAINWATER
PIPES and GUTTERS

We now stock **KEY** Pitch
Fibre Drain Pipes



CRAY AVENUE, ST. MARY CRAY, ORPINGTON
KENT. Tel. Orpington 31311 (10 lines)

Also at WEIRSIDE WORKS, LOWER BRISTOL ROAD, BATH
Tel: BATH 78681-2-3

(4 in 1) x 7 = GOOD BUSINESS

TWO MORE DROTTS for BRUNSTON PLANT HIRE



Brunston Plant Hire Ltd., of Newcastle have no doubts about the wisdom of using Drott equipped BTD-6 Crawler Tractors. So profitable an investment have they found this versatile shovel equipment that they have now increased their fleet to 7, making them one of the largest Drott "4 in 1" operators in the North East.

The Drott "4 in 1" tackles digging—dumping—grading—spreading—lifting—carrying; all with equal efficiency. Plant Hirers find them the ideal answer to most customers' requirements. One or more International Drotts would mean more business for you. Write for full details.

Brunston Plant Hire taking delivery
of the 7th Drott "4 in 1" equipped
International Crawler Tractor



CRIPPS for

Tractors and equipment for digging, loading, grading, winching

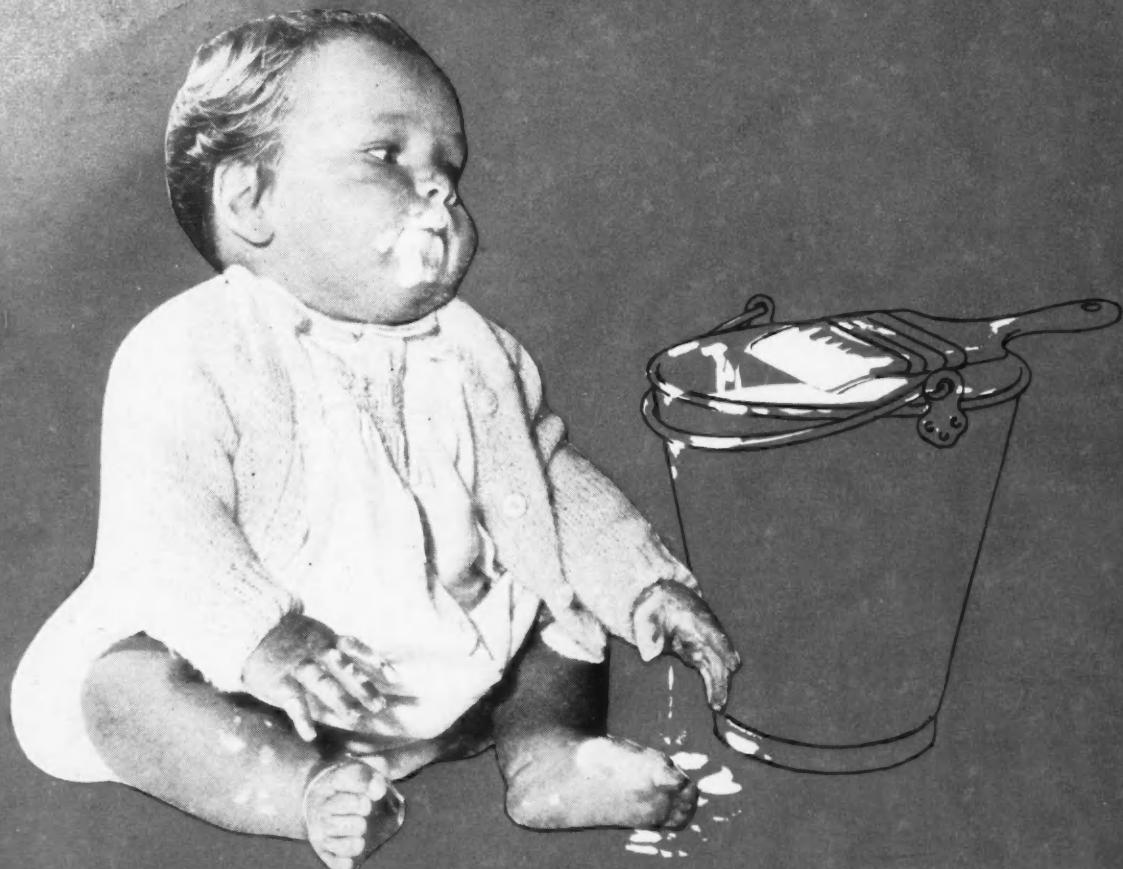


SALES OFFICE: ABBEY BRIDGE, NOTTINGHAM.
Phone: Nottingham 71161 (5 lines) Grams: Criptracnottm Telex.

SERVICE & PARTS: TRIUMPH ROAD, NOTTINGHAM.
Phone: Nottingham 74235 (10 lines) Grams: Criptracnottm Telex.

MANCHESTER DEPOT: ORDSALL LANE, Salford S.
Phone: Trafford Park 1658 (3 lines) Grams: Criptrac Man Telex.

NORTH EASTERN DEPOT: SHILDON, CO. DURHAM.
Phone: Shildon 261 (6 lines) Grams: Criptracshildon Telex.



ANY MOMENT NOW . . .

Like the housewife a Plant Engineer cannot always keep a watchful eye on his crawlers. That is why more and more Plant Engineers avoid trouble with breakdowns in expensive plant and machinery by using VIGZOL Lubricants.

You can safely leave your plant to its own devices when it is protected by the only specialised processed oil for the toughest jobs.

There is a Lubrication Specialist ready to advise you only a phone call away at Greenwich 4361.



THE VIGZOL OIL COMPANY LTD • VIGZOL HOUSE • GREENWICH • LONDON S.E.10



NOW !

The latest
addition to the
Bray range
of tractor
shovels...



the BL460 T - 110 BHP - 2½ cu. yd. BUCKET

Bigger, faster and more powerful, the BL. 460 T has been designed to tackle the roughest, toughest jobs under the roughest, toughest conditions — dig, doze, carry or load, the BL. 460 T gives you peak performance right round the clock. British-built, with British performance figures, the BL. 460 T incorporates the latest technical developments.

**BUCKETS available up to 5 cu yds.
LIFTING CAPACITY 12,000 lbs.**

Write for further details to:

**BRAY CONSTRUCTION
EQUIPMENT LTD.**

(One of the Sheepbridge Engineering Group)

FAGGS ROAD • FELTHAM • MIDDLESEX

Telephone: Feltham, 3471 'Grams: "Braydozer" London.

SHERMAN



The Sherman Panther Digger, has a working range of 188°, a 12 ft. reach below ground level and a digging force of 19,250 lbs. Available on a wide selection of Tractors as well as the full range of Brayloaders.

BL. 430 A Four Wheel Drive Loading Shovel with planetary hub reduction unit and a 1½ cubic yard rated capacity bucket as standard. Powered by Ford Diesel 4 cylinder engine with a 52 b.h.p. capacity. With conventional front wheel steering. A very useful equipment which can be fitted with any of the quickly interchangeable attachments.

**TIMBER
SECTIONAL BUILDINGS**

SITE OFFICES, CANTEENS, HOSTELS,
STORE HUTS, etc.



Consult

I. CLIFTON & SONS LTD
for IMMEDIATE DELIVERY

13 NEED PARADE WEMBLEY MIDDX
TEL. WEMBLEY 2921-2-3

BUCKTON

ESTAB. 1930



FOR HIRE

**MEN AND MACHINES
ALWAYS AVAILABLE**

BACKED BY SERVICE

FOR HIRE

- Caterpillar Traxcavators, D4, D7, D8 Caterpillar
Tractor Dozer/Scrapers, D8 Caterpillar Tractors
with Type 80 Birtley 14/18 cu. yd. Scraper, 10 RB,
19 RB and 22 RB Excavators.

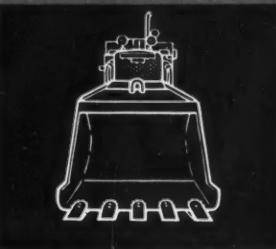
**THE BEST ON EARTH-
BUCKTON OF ASHTON**

BUCKTON LIMITED, 63 Stockport Rd., Ashton-under-Lyne
Tel: Ashton-under-Lyne 1848 (3 lines)

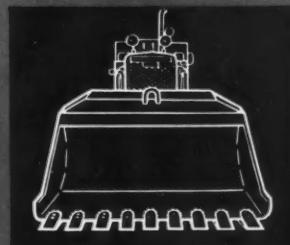
A for advantages
B for big-capacity
C for cutting costs

FOR DROTT

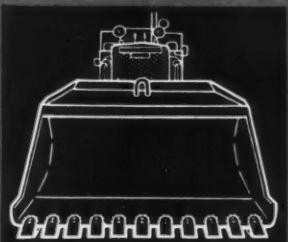
And Drott for the biggest success in crawler shovels — Drott for unmatched performance. In fact, Drott for unbeatable value.



6K3 Capacity 1 cubic yard.
Break-out force 15,600 lb.



9K3 Capacity 1½ cubic yards.
Break-out force 19,000 lbs.



20K3 Capacity 3 cubic yards.
Break-out force 46,000 lb.

These basic Drott features are "originals":

1. PRY-ACTION BREAK-OUT
2. SHOCK-SWALLOWING HYDRO-SPRING
3. PATENTED AND EXCLUSIVE DROTT FOUR-IN-ONE
4. CLOSED HYDRAULIC SYSTEM
5. GROUND LEVEL BUCKET ROLL-BACK
6. LOAD TRANSPORT ON PATENTED, EXCLUSIVE FRAME MOUNTED SKID-SHOES
7. PARALLELOGRAM RAISE ACTION

A DROTT SIZE FOR EVERY SIZE OF JOB!

BOWEN

JAMES BOWEN AND SONS LIMITED
EDINBURGH • GLASGOW • ABERDEEN

Head Office
45-59 Pitt Street, Edinburgh 3. Telephone: WAverley 4204
428 Helen Street, Glasgow, S.W.1. Telephone: GOVan 2611-2
Back Hilton Road, Aberdeen. Telephone: Aberdeen 43332

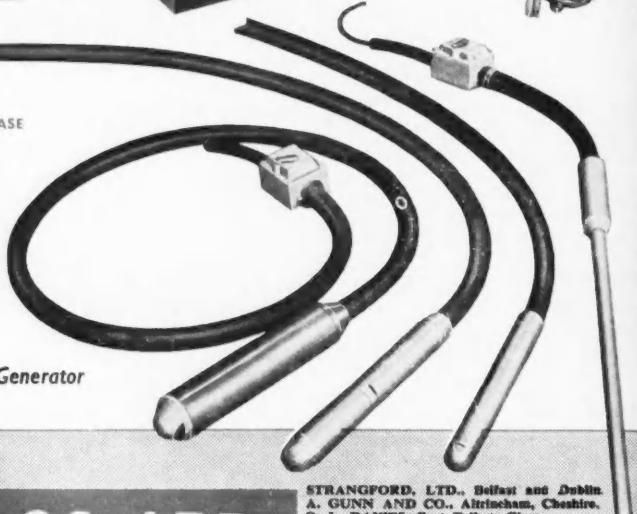


CONTRACTORS CAN NOW ENJOY
THE ADVANTAGES OF THIS
ALL BRITISH MACHINE!

NEW—FITTED WITH OVERLOAD AND ANTI SINGLE-PHASE
SWITCHING DEVICE, FOR EVEN GREATER RELIABILITY.

Light but very powerful. No flexible shaft yet extreme flexibility in operation. Safe low working voltage. Frequency of 12,000 R.P.M. combined with large amplitude. Proved exceptionally high compaction of very harsh mixes. Vibrators can operate over 200 feet away from generators avoiding movement of heavy equipment.

Only 4-Core Cable between Vibrator Switch and Generator



Send for further details of the full range:

E · P · ALLAM & CO. LTD.

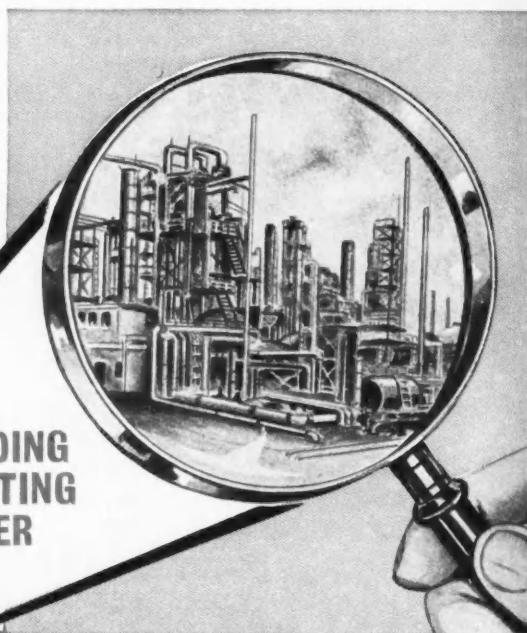
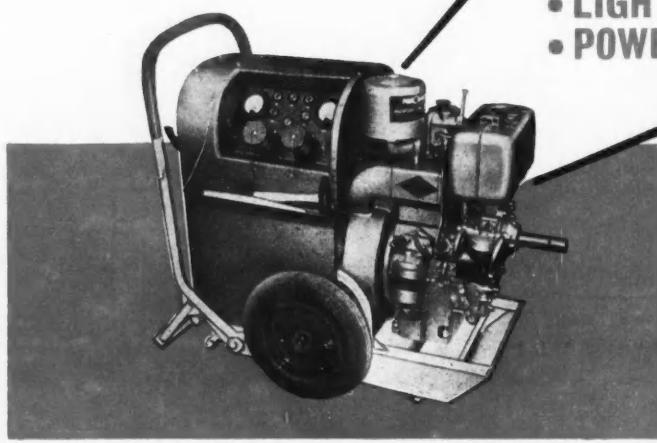
132-135 SLOANE STREET, S.W.1. TELEPHONE: SLOANE 9976 (5 lines)
SCOTLAND 39 CAVENDISH STREET, GLASGOW, C.S. TELEPHONE: SOUTH 0186

STRANGFORD, LTD., Belfast and Dublin.
A. GUNN AND CO., Atricham, Cheshire.
O. L. DAVIES, Pen Talbot, Glam.
J. LEWIS (MACHINERY), LTD., Burdon,
Gwent, Glam.
G. B. CORNER AND SONS, Leeds and
Nottingham.
JOHN ROULSTONE, LTD., Newcastle upon
Tyne.
W. R. SELWOOD, Chandler's Ford, Hants.

Introducing another outstanding **BALARC** PRODUCT

**LIGHT WEIGHT
MULTI-PURPOSE
POWER PACK**

- WELDING
- LIGHTING
- POWER



WELDING CURRENT: 25—130 amps.

LIGHTING: 250 v 50 cycles for lighting forty 100 watt bulbs, or one hundred 40 watt bulbs or nine 500 watt floodlights.

POWER: 250 v 50 cycles for pumps, compressors, drills, etc.

HIGHLY MOBILE: Weight 700 lbs.

ASHTON-YOUNG Engineering Development Co. Ltd.

76 CAMBRIDGE ROAD, KINGSTON-UPON-THAMES, SURREY

Telephone: KINGston 9476

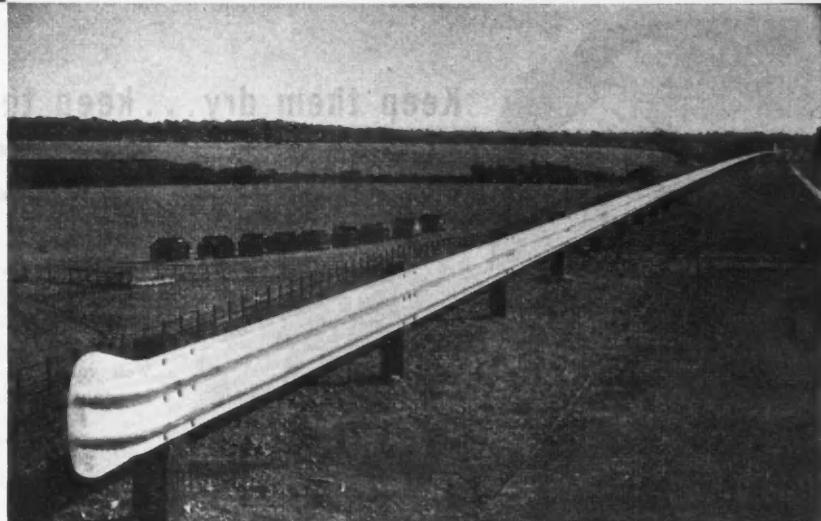
SAFETY-RAIL FENDERS



*Safety-rail fenders
provide maximum protection for the motorist
on high speed motorways.
A safeguard to life and property at
all danger points.*

Photographs show
Safety-rail fenders
erected on the
**LONDON—
BIRMINGHAM
MOTORWAY**

*Photographs by courtesy of
John Laing and Son Limited*



DORMAN LONG (STEEL) LIMITED, AYRTON ROLLING MILLS, MIDDLESBROUGH

Branch Offices

LONDON, BELFAST, BIRMINGHAM, BRISTOL, GLASGOW, LEEDS
MANCHESTER, NEWCASTLE AND NOTTINGHAM

DORMAN LONG



REPAIR SERVICE
on all makes of
THEODOLITES & LEVELS
PICK-UP AND DELIVERY SERVICE
SURVEY & GENERAL INSTRUMENT CO. LTD.
329 HIGH HOLBORN, LONDON, W.C.I.
Telephone: HOLborn 4118 (3 lines)

Agents in the North West:
CHADBURNS (Liverpool) LTD.
31 Brunswick Street, LIVERPOOL.

Agents for



of Switzerland

In house-raft construction

specify



BLANKET DAMPCOURSE

Geo. Wimpey & Co. Ltd. use BCL Blanket Dampcourse. Picture shows film in position.

BCL Blanket Dampcourse (0.005" thick BCL polythene film) is the answer to the problems of moisture penetration into concrete house-rafts. It stops water rising through the raft into the house and, by preventing water-absorption by the concrete, removes the danger of the raft being damaged by frost or sulphate.

BCL Blanket Dampcourse is

- waterproof**—virtually eliminates moisture-absorption by the concrete;
- rotproof** and **chemically inert**—will not break down or lose efficiency;
- tough and flexible**—will not easily break or tear when being laid;
- very easy to handle**—the film is light in weight and is simply laid over the fill before the concrete is placed;
- cheap**—the film costs less than 11d. per sq. yd. delivered to site U.K.

Send today for free illustrated booklet incorporating a report on tests carried out with this material by the Industrial Research Laboratories, City of Birmingham Public Works Dept.



BRITISH CELLOPHANE LTD.
Henrietta House, 9 Henrietta Place,
London, W.I.

To: British Cellophane Limited
Henrietta House, 9 Henrietta Place, London, W.I.

Please send me, free and without obligation,
your booklet "BCL Blanket Dampcourse".

Please tick
as appropriate

NAME.....

ADDRESS.....

CJ8



PVC WATERPROOF GARMENTS
DONKEY JACKETS · DUFFLE COATS · SAFETY FOOTWEAR

Can be obtained from our Warehouses throughout the country. Send for leaflets showing the full range of all types of Protective Gloves and Footwear to:

NORTHIDE LIMITED

A main distributor of North PVC Gloves and Clothing

Dept. C.J., IMPERIA HOUSE, GEORGE ST., HYDE, CHESHIRE.

Tel. HYDE 3581 and at: London · Birmingham · Glasgow

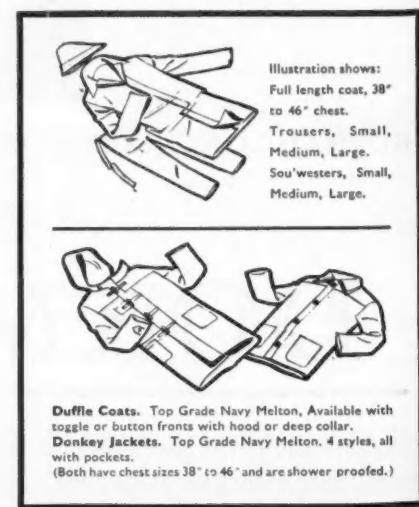
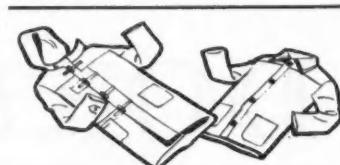


Illustration shows:
Full length coat, 38" to 46" chest.
Trousers, Small, Medium, Large.
Sous'westers, Small, Medium, Large.



Duffle Coats. Top Grade Navy Melton, Available with toggle or button fronts with hood or deep collar.
Donkey Jackets. Top Grade Navy Melton. 4 styles, all with pockets.
(Both have chest sizes 38" to 46" and are shower proofed.)

COMPRESSOR HIRE

Sarton
& CO. (LONDON) LTD

Head Office & Works: ESKDALE ROAD, INDUSTRIAL ESTATE, UXBRIDGE, MIDDLESEX. Uxbridge 8644-5-6-7

NORTH-WESTERN:
76 North Western Street,
Ardwick,
Manchester, 12.
'Phone: Ardwick 6192

NORTH-EASTERN:
Carbury Road, Aycliffe Industrial
Estate, near Darlington,
Co. Durham.
'Phone: Aycliffe 2277

MIDLANDS:
Leamore Lane,
Leamore, Walsall,
Staffs.
'Phone: Bloxwich 75219

SOUTH WALES:
Caradog Road, Bridgend
Trading Estate, Bridgend
Glamorgan.
'Phone: Bridgend 1170

THE LITTLE
MACHINE
WITH THE

BIG OUTPUT

The work of a TEN TON static roller
can be done more cheaply if you use modern equipment like this

cuts

TRANSPORT COSTS
RUNNING COSTS
CAPITAL COSTS } **1/3**



LET US DEMONSTRATE
THIS REMARKABLE
VIBRATING ROLLER
ON ONE OF YOUR SITES

MOBILE HAULAGE

LTD

230 TOTTENHAM COURT ROAD, LONDON, W.1.

Tel: LANgham 7833/4/5

IF IT NEEDS TO BE STOPPED
—IT NEEDS



FOR RUGGED DUTY!
FOR LONG
WORKING LIFE!
FOR EVERY
INDUSTRIAL BRAKE
AND CLUTCH NEED!

INDUSTRIAL BRAKE LININGS

For Technical Information get in touch
with your nearest **Don** depot

SMALL & PARKES LTD

HENDHAM VALE WORKS • MANCHESTER 9

COLYhurst 2511

LONDON OFFICE:

251 Kingston Road, London, SW19 Cherrywood 3806/7

ABERDEEN 26062
BELFAST 28967
BIRMINGHAM 5 Midland 4659
BLACKBURN 6581
BRADFORD 31114
BRISTOL 27214
CARDIFF 27026
CARLISLE 21389
CHESTER 21280
COVENTRY 64914
DUNDEE 26728
EDINBURGH 1 Waverley 4294
GLASGOW 22 Central 4593
HARROGATE 67058
HULL 52072
IPSWICH 53023

LEEDS 3 20664/5
LEICESTER 56260
LEYTON Leytonstone 6068
LIVERPOOL Royal 5202 and 1251
MANCHESTER 3 Blackfriars 0596
MIDDLESBROUGH 44576
NEWCASTLE-ON-TYNE 2 27142 and 27942
NOTTINGHAM 43646
SHEFFIELD 1 25529
SOUTHAMPTON 21276
STOKE-ON-TRENT 44021
WAKEFIELD 4571
WIMBLEDON Cherrywood 3806/7
Republic of Ireland:
DUBLIN, 35 Westland Row 66597 and 66518

IBL 14



Here's the machine to slice production costs!



ALL PURPOSE EXCAVATOR

A Smith 12 face shovel digging and loading limestone for the Harefield Lime Co. Ltd.
Rickmansworth



The most remarkable thing about the SMITH 12 is its high-speed working cycle. It digs and dumps more bucket-loads per hour than any machine of comparable cost; in fact its output—on a time-basis—often exceeds that of much larger machines. Excavating pays better profits when you use a SMITH 12!



JUST ADDED! . . . A new dragshovel arm of cranked (or "gooseneck") design is now available as an alternative to the "straight" type. Send for leaflet which explains its advantages.

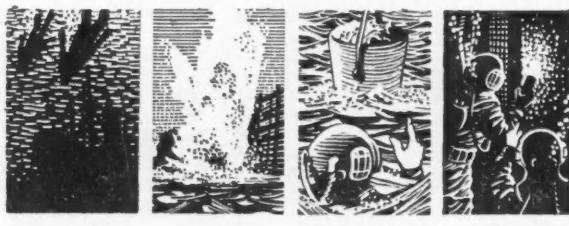
THOMAS SMITH & SONS (RODLEY) LTD
CRANE AND EXCAVATOR WORKS • RODLEY • LEEDS

Tel: Pudsey 2844 Wires: Smith, Rodley, Telex. (Telex. No. 55105)

**A complete
diving
service
... ready
day-and-
night!**

A jammed lock gate—a big underwater cutting job—a new outfall—you'll need a first-class diving team on the spot at once. Send for Universal Divers. Universal have had experience in every field of submarine work under all conditions. Universal specialise in underwater surveys, frequently using "Frogman" equipment for speed and cheap air transport to overseas contracts.

The Universal service operates day-and-night, too! At each of our three offices, divers are available all round the clock. Next time you need a diver in a hurry send for Universal!



Underwater Surveyors.
Contractors & Engineers
to Consulting & Civil
Engineers, and County
and Local Authorities.
On Admiralty Lists.

**UNIVERSAL
DIVERS LTD.**

40 North John St., Liverpool 2
Telephone: CENTral 4226
Also at Newcastle and Weymouth

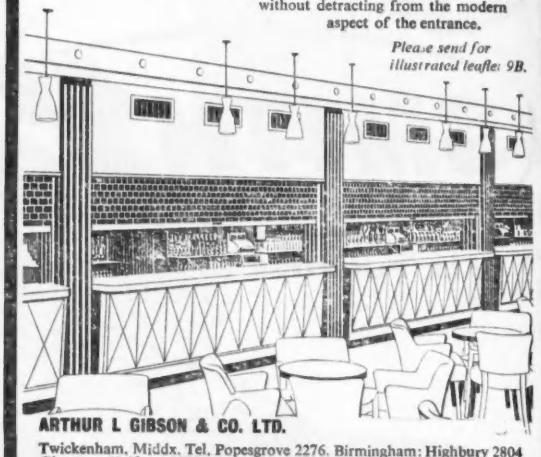
KINROD GRILLES

by the makers of Kinnear Shutters and Kinylon Grilles

solve the problem

of combining complete protection with an attractive appearance. Although the Kinrod Grille is enormously strong, its pattern gives good visibility without detracting from the modern aspect of the entrance.

Please send for illustrated leaflet 9B.



ARTHUR L. GIBSON & CO. LTD.

Twickenham, Middx. Tel. Popesgrove 2276. Birmingham: Highbury 2804
Glasgow: Halfway 2928 Manchester: Central 1008 Cardiff 51428

BULK EXCAVATION

BY

CONTRACT or SUB-CONTRACT

- * TRAXCAVATORS—CATERPILLAR
- * DOZERS—CATERPILLAR
- * SCRAPERS—LE TOURNEAU
- * EXCAVATORS—SHAWNEE

THIS EQUIPMENT IS ALSO AVAILABLE
FOR **HIRE** AT REASONABLE RATES

OWN TRANSPORT

APPLY:

ALF. KITCHING



Photograph by courtesy of the Appleby-Frodingham Steel Company (Branch of the United Steel Companies Ltd.)

EALAND • CROWLE
NR. SCUNTHORPE • LINCS.
TEL: CROWLE 366



ANDERSON

always in the lead with

DERRICK CRANES

— often imitated but never equalled —

One Derrick Crane may look the same as another—from a distance. At close quarters the differences are astounding. The Cabin interior, alone, clearly establishes ANDERSON design and construction to be supreme. The clean, compact gearing, built on unique Unit principles, guarantees mechanical efficiency and reliability—and ensures lowest erection and operating costs. The driver's panoramic visibility, centralised easy control and comfort have to be seen to be believed. High performance and safety are spontaneous—a banksman often superfluous.

These and other exclusive features explain why independent examiners are so impressed, and more and more users specify ANDERSON only

EXTENSIVE HIRE FLEET OF MODERN CRANES
DEPOTS AT LONDON AND BIRMINGHAM

Telephone :
CARNOUSTIE
2214/5 and 2110

Telegrams :
"DIAMOND"
CARNOUSTIE

ANDERSON

THE ANDERSON-GRICE CO. LTD.
TAYMOUTH ENGINEERING WORKS, CARNoustie, SCOTLAND

London Office :
FINSBURY PAVEMENT
HOUSE, 120 MOORGATE
E.C.2.

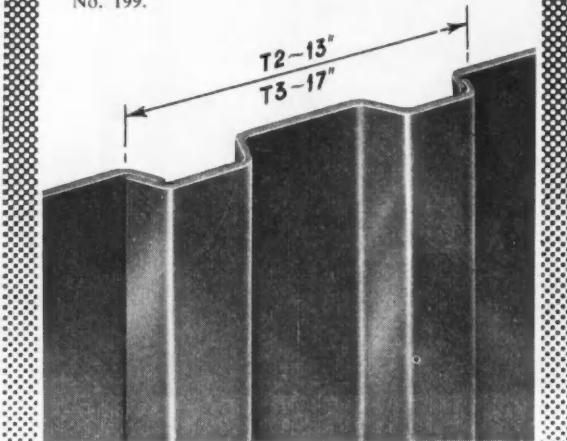
Telephone : MON 4629

LAP-JOINTED SECTION Steel Trench Sheeting

The B.S.P. lap-jointed sections of steel trench sheeting, T2 and T3, are accurately formed from cold-rolled steel plate.

Both sections are particularly economical when used for temporary work in trenches or shallow cofferdams and are generally available from stock.

For full details of these sections and of the hinge-jointed section L8, please write for List No. 199.

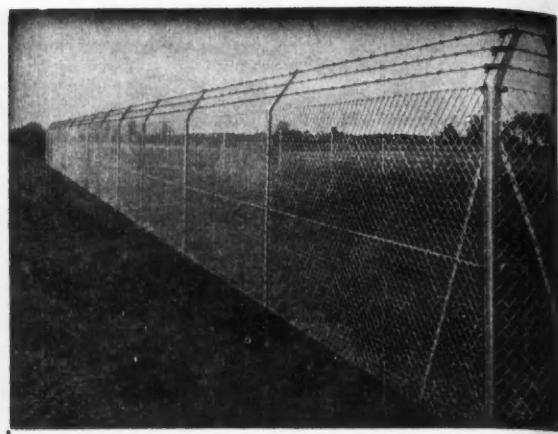


TECHNICAL REPRESENTATIVES THROUGHOUT THE WORLD
THE BRITISH STEEL PILING CO. LTD.

10 HAYMARKET, LONDON, SW1

Telephone: TRAfalgar 1024

BSP 163



PREMIER' BRAND FENCING UNITS & GATES

FENCING CONTRACTS Undertaken through well established Local Agents.

MATERIALS Supplied Only, if required.

QUANTITIES & SPECIFICATIONS drawn up, advice freely given.

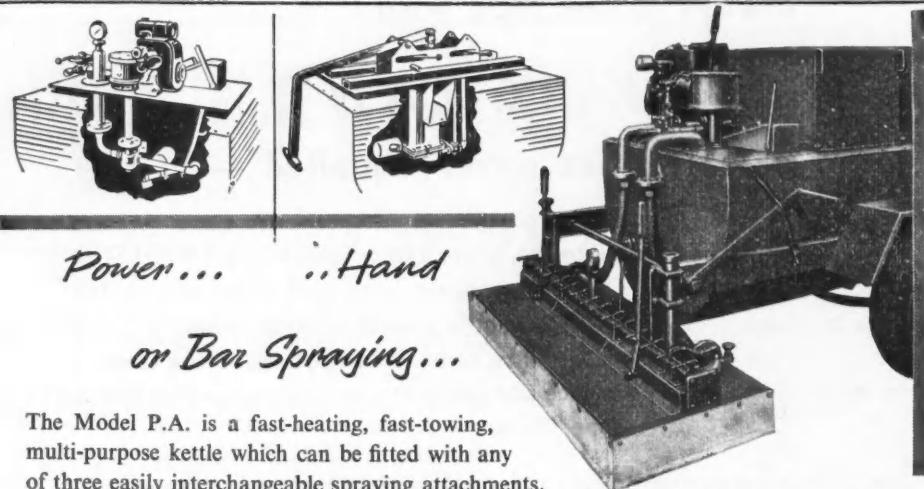
ILLUSTRATED SPECIFICATION LEAFLETS available on request.

CHAIN LINK FENCING

LIMITED

KING'S LANGLEY · HERTS.

Telephone: King's Langley 4041/2/3



Power... Hand
on Bar Spraying...

The Model P.A. is a fast-heating, fast-towing, multi-purpose kettle which can be fitted with any of three easily interchangeable spraying attachments.

Each attachment is self-contained and drops right on to heater. Vaporising type oil burners give heating rates up to 4 deg. F. per min. Capacities up to 320 gallons. HAND SPRAY UNIT has a manually operated piston type pump for one hand lance. THE POWER SPRAY UNIT has a petrol engine and gear pump for one or two hand lances. THE BAR-SPRAY UNIT has a 5 h.p. petrol engine and rotary displacement pump. 7 ft. 6 in. full circulating spraybar to B.S.S.1707.



"How's
that for
versatility?"

PHœNIX

THE PHœNIX ENGINEERING CO. LTD., PHœNIX WORKS, CHARD, SOMERSET.
GD 1A

London Address: 10 Norfolk Street, London, W.C.2. Telephone: Covent Garden 031517.

Telephone: Chard 3226.



CONTRACTORS' GUIDE TO AGGREGATES

BEDFORDSHIRE

BARDON HILL QUARRIES (ELLIS AND EVERARD), LTD., near Leicester. (Tel.: Coalville 1226/7/8; or London: Norwood Hill 115.) (For data, see Leica.)
DANGERFIELD, F. J., & CO., LTD., 261A Finchley Rd., London, N.W.3. (Tel.: Hampstead 8044/8.) For all road aggregates, kerbs, sets. (See London.)
FERDERSAND AGGREGATES, LTD., Northampton Road Quarries, Rushden (2354/5). (See Northants.)
GRAVEL PRODUCTS (HUNTS.), LTD., St. Neots, Hunts. (Tel.: St. Neots 123.) Pits at Little Paxton, near St. Neots. (Tel.: St. Neots 308.) Deliveries in Hunts. and South Cambs.

ST. IVES SAND AND GRAVEL CO., LTD., 22 The Broadway, St. Ives, Hunts. (Tel.: St. Ives 2441/2/3/4.) (See Huntingdonshire for details.)
WEBB, C., CAMBRIDGE, 35 Magrath Avenue, Cambridge, C. (Tel.: Cambridge 3552.) (See Cambridgeshire.)
WELFORD GRAVELS, LTD., Head Office: Goldington, Bedford. (Tel.: 4587/8/9.) Largest producers of all grades of washed aggregates in Bedfordshire and Northamptonshire. Regular deliveries anywhere.

BERKSHIRE

AMEY'S AGGREGATES, LTD., Lower Wootton, Boars Hill, Oxford. (Tel.: Oxford 35421—10 lines.) Pits at Dry Sandford, near Abingdon, Sutton Courtenay, near Abingdon. (Tel.: Sutton Courtenay 275.) Theale, near Reading. (Tel.: Theale 358.) Dorchester, Oxon. (Tel.: Clifton Hampden 236.) Billing, Northampton (Tel.: Cogenhoe 464) for washed and graded aggregates to B.S.

BARDON HILL QUARRIES (ELLIS AND EVERARD), LTD., near Leicester. (Tel.: Coalville 1226/7/8; or London: Norwood Hill 115.) (For data, see Leica.)

BULL BRGS. S. AND L., LTD., 126A High Street, Winchester. (Tel.: 2264.) (See Hampshire.)

COFF, HARRY A., LTD., Buckhurst Hill, Cheshire, Ascot, Berks. (Tel.: Ascot 1026/7.) Sand, all grades of washed aggregates, hardcore, clinker, ash and broken.

CURTIS, J. AND SONS, LTD., Botley Works, Oxford. (Tel.: Oxford 41081/2/3.) Sand and all grades of washed aggregates. Pits at Radley, near Abingdon. (Tel.: Abingdon 441.)

DANGERFIELD, F. J. & CO., LTD., 261A Finchley Rd., London, N.W.3. (Tel.: Hampstead 8044/8.) For all road aggregates, kerbs, sets. (See London.)

GRUNDON, S. (EWELME), LTD., Ewelme, Oxon. (Tel.: Ewelme 29.) London Office: (Tel.: 4156.) All grades washed aggregates. Path hoggins, broken stone, building stone.

HAINES, H. (WITNEY), LTD., Oxford Road, Witney (Tel.: Witney 42.) All grades washed aggregates, hardcore, pitching and broken stone, Cotswold building and walling stone.

JAMES AND CO., LTD., 2C Buckingham Avenue, Slough. Sand, aggregates, hardcore, ashes, building and bulk excavation. (Tel.: Slough 20361/2/3.)

LONDON BALLAST CO., LTD., (Tel.: Paddington 5064.) 55A Porchester Terrace, North Paddington, W.2.

MOLE (LECHLADE), LTD., Gravel Pit, Burford Road, Lechlade, Glos. (Tel.: Lechlade 219.)

RAHAL OF BASINGSTOKE, LTD., Basingstoke, Hants. (Tel.: 85.) Concrete aggregates, building sand, path gravel, hoggins, etc.

WRAYSBURY SAND AND GRAVEL CO., LTD., Station Road, Theale, Reading. (Tel.: Theale 373.)

BRECKNOCKSHIRE

NASH ROCKS STONE AND LIME CO., LTD., Presteigne, Radnor. (Tel.: Presteigne 352.) (See Herefordshire for details.)

SALOP SAND AND GRAVEL SUPPLY CO., Amington, Wellington. (Tel.: 961.) Salop.

BUCKINGHAMSHIRE

AMEY'S AGGREGATES, LTD., Lower Wootton, Boars Hill, Oxford. (Tel.: Oxford 35421—10 lines.) Pits at Dry Sandford, near Abingdon, Sutton Courtenay, near Abingdon. (Tel.: Sutton Courtenay 275.) Theale, near Reading. (Tel.: Theale 358.) Dorchester, Oxon. (Tel.: Clifton Hampden 236.) Billing, Northampton (Tel.: Cogenhoe 464) for washed and graded aggregates to B.S.

ASPHALTE CARPETS, LTD., 38 Buckingham Palace Road, London, S.W.1. (Tel.: Tate Gallery 4857 or Gérard's Cross 3496.) Manufacturers of all grades of paved bitumen macadam, gravel asphalt and cold asphalt.

BARDON HILL QUARRIES (ELLIS AND EVERARD), LTD., near Leicester. (Tel.: Coalville 1226/7/8; or London: Norwood Hill 115.) (For data, see Leica.)

BUCKEN STONE CO., LTD., Stratton Audley, Bucken, Oxon. (Tel.: Stratton Audley 238.) Manufacturers and suppliers of all types of limestone, tarmacadam, dry, pitching stone, hardcore, etc.

COFF, HARRY A., LTD., Buckhurst Hill, Cheshire, Ascot, Berks. (Tel.: 1026/7.) (See Berkshire.)

DANGERFIELD, F. J. & CO., LTD., 261A Finchley Road, London, N.W.3. (Tel.: Hampstead 8044/8.) For all road aggregates, kerbs, sets. (See London.)

DRINKWATER, W. W. (WILLESDEN), LTD., Rush Green, Denham, Bucks. (Tel.: Denham 2241/2/3.)

GRUNF. N. S. (EWELME), LTD., Ewelme, Oxon. (Tel.: Ewelme 29.) London Office: (Tel.: 4156.) All grades washed aggregates. Path hoggins, broken stone, building stone.

HAINES, H. (WITNEY), LTD., Oxford Road, Witney (Tel.: Witney 42.) All grades washed aggregates, hardcore, pitching and broken stone, Cotswold building and walling stone.

HALL, R. AND CO., LTD., Bremford, Middlesex. (Tel.: 4360/1.) and at Gerrards Cross. Pits at Weybridge (Middx.) and Iver, Bucks. Pits at

JAMES AND CO., LTD., 2C Buckingham Avenue, Slough. Sand, aggregates, hardcore, ashes, building and bulk excavation. (Tel.: Slough 20361/2/3.)

LONDON BALLAST CO., LTD., (Tel.: Paddington 5064.) 55A Porchester Terrace, North Paddington, W.2.

MARLOW SAND AND GRAVEL CO., LTD., Westhorpe Pit, Little Marlow, Bucks. (Tel.: 479.)

STUART MAYCO, LTD., Gordon Road, High Wycombe. (Tel.: High Wycombe 2591/2.)

WELFORD GRAVELS, LTD., Head Office: Goldington, Bedford. (Tel.: 4587/8/9.) (See Bedfordshire.)

CAMBRIDGESHIRE

BARDON HILL QUARRIES (ELLIS AND EVERARD), LTD., near Leicester. (Tel.: Coalville 1226/7/8; or London: Norwood Hill 115.) (For data, see Leica.)

DANGERFIELD, F. J. & CO., LTD., 261A Finchley Rd., London, N.W.3. (Tel.: Hampstead 8044/8.) For all road aggregates, kerbs, sets. (See London.)

FERDERSAND AGGREGATES, LTD., Northampton Road Quarries, Rushden (2354/5). (See Northants.)

GRANITE PRODUCTS (HUNTS.), LTD., St. Neots, Hunts. (Tel.: St. Neots 123.) Pits at Little Paxton, near St. Neots. (Tel.: St. Neots 308.) Deliveries in Hunts. and South Cambs.

ST. IVES SAND AND GRAVEL CO., LTD., 22 The Broadway, St. Ives, Hunts. (Tel.: St. Ives 2441/2/3/4.) (See Huntingdonshire for details.)

WEBB, C., CAMBRIDGE, 35 Magrath Avenue, Cambridge, C. (Tel.: Cambridge 3569 or 4533.)

WELFORD GRAVELS, LTD., Head Office: Goldington, Bedford. (Tel.: 4587/8/9.) (See Bedfordshire.)

CAMBRIDGESHIRE

DARBY'S SAND AND GRAVEL CO., LTD., The Brook, Sutton, Ely. (Tel.: Sutton 391/3.) All grades of washed sand and gravel, ready-mixed concrete. Pits: Mepple and Chippingham, Camb. (See Huntingdonshire for details.)

DICKSON, R. LTD., Tewinbury Corner, Newmarket Road, Cambridge. All grades washed sand and gravel, reject stone, hoggins, breeze, clinker, "Terlite" crushed granite, foamed slag, concrete and brick hardcore, ready-mixed concrete—all grades. (Tel.: Cambridge 4007/8/9.)

FRECKENHAM GRAVEL CO., LTD., The Brook, Sutton, Ely. (Tel.: Sutton 391/3.) Washed sand and gravel.

MACLAREN BROS. (KENNETT), LTD., gravel, tarred and bituminous, gravel asphalt, washed sand and gravel at 20 sites. (Tel.: Sutton 391/3.) Delivered to any site.

THEALE, R. LTD., Sutton, Ely. (Tel.: Sutton 391/3.) All grades washed sand and gravel, reject stone, hoggins, clinker, ashes, brick rubble, pitching, hardcore and granite chippings. All to B.S. Specifications. Delivered to any site in East Anglia.

ST. IVES SAND AND GRAVEL CO., LTD., 22 The Broadway, St. Ives, Hunts. (Tel.: St. Ives 2441/2/3/4.) (See Huntingdonshire for details.)

WEBB, G., CAMBRIDGE, 35 Magrath Avenue, Cambridge. (Tel.: Cambridge 3569 or 4533.)

WELFORD GRAVELS, LTD., Head Office: Goldington, Bedford. (Tel.: 4587/8/9.) (See Bedfordshire.)

CARDIGANSHIRE

NASH ROCKS STONE AND LIME CO., LTD., Presteigne, Radnor. (Tel.: Presteigne 352.) (See Herefordshire for details.)

SALOP SAND AND GRAVEL SUPPLY CO., Amington, Wellington. (Tel.: 961.) Salop.

CHESHIRE

BUCKTON QUARRY, Broken stone, all grades. (Tel.: Mossley 123.) Or white Marls, Oldham.

CASWELL SAND AND GRAVEL QUARRIES LTD., Pennant End, Quare, Whaley Bridge. (Tel.: Whaley Bridge 139.) Washed sand and gravel.

CAWOOD, WHARTON AND CO., LTD., Platly Gwyn Quarry, Llanarmon, near Mold. (Tel.: Llanarmon 27.) Crushed limestone and tarred macadam, all grades.

CHESTER AND NORTH WALES TARRED MACADAM CO., LTD., Llanarmon, near Mold. (Tel.: Llanarmon-yn-llan 43.) Hard, broken limestone, dry and coated to B.S. Instructions to registered officers: Market Chambers, Tower Square, Tunstall, Stoke-on-Trent. (Tel.: Stoke-on-Trent 88094.)

CROXDEN GRAVEL LTD., Cheddie, Stoke-on-Trent, Staffs. (Tel.: Tean 393.) Manchester Office: Blackfriars 3766/7. Plant capacity, 2,000 tons per day.

DUNNING AND SON, LTD., (See Shropshire.)

ELLESMORE SAND AND GRAVEL CO., LTD., Wood Lane, Ellesmere, Salop. (Tel.: Ellesmere 167.) For details see Shropshire.

HARDER AND THOMAS, LTD., Bayston Hill Quarry, Shrewsbury. (See Shropshire for details.)

HILTON GRAVEL LTD., Rice Street, Liverpool Road, Manchester. (Tel.: Deanegate 5455 and 5463.) Quarries at Lathom, Staffs. (Tel.: Lathom 21/22.) All sizes of stone, sand, gravel.

HULLAND GRAVEL LTD., Cheddie, Stoke-on-Trent, Staffs. (Tel.: Cheddie 2323/4, 2119 and 2195.) Manchester Office: Hardy's Buildings, 3 Cateaton Street, Manchester. (Tel.: Blackfriars 2277/8.)

LEEDS AND YORK GRAVELS LTD., 27, 30, 32/3, 3001/2. Pits at Orsett, near Stanmore-le-Hope. Upminster. All grades of washed aggregates, plastering and building sands supplied and delivered; also hardcore and ash.

DANGERFIELD, F. J. & CO., LTD., 261A Finchley Rd., London, N.W.3. (Tel.: Hampstead 8044/8.) For all road aggregates, kerbs, sets. (See London.)

FERDERSAND AND WELFORD GRAVEL CO., LTD., 3000/2. Pits at Orsett, near Stanmore-le-Hope. Upminster. All grades of washed aggregates, plastering and building sands supplied and delivered; also hardcore and ash.

HALL AND CO., LTD., Manory Road, Romford. (Tel.: Romford 4232.) Pits at Avelay, Boreham and Linford, near Grays. Gravel aggregates, concrete, plastering and building sand.

HUNNEDGE, F. A. AND SON, LTD., Rayne Road, Braintree, Essex. (Tel.: Braintree 151 and 151.) Washed and sorted stone 1/2 in. to 10 in.; washed concrete sand and washed soft building sand. Classified sand for asphalt. Pits at Braintree, Bocking, Beales End, Hedingham and Alphamstone.

LEIGH BUILDING SUPPLY CO., LTD., Head Office: 78200, London Road, Leigh-on-Sea, Essex. (Tel.: 78200.) Lined. All grades washed materials, building sand, hardcore, ashes, bricks, granite.

PETERS AND BARMHAM, LTD., 309 South Street, Romford. (Tel.: Romford 44141—7 lines.) Washed and crushed gravel, all sizes; sand. Pits at Ashfield, Chignall St. James, Dagenham, Great Waltham, North Brentwood, North Weald, Thorpe-le-Soken.

READ, P. T. LTD., Foxlands Crescent, Dagenham. (Tel.: Dagenham 6111.) All sands, ballast and shingles supplied and delivered also ready-mixed concrete.

REALFORD, A. LTD., Fairlop, Ilford. Forest Road, Ilford. (Tel.: Ilford 6111/2/3.) High-grade sand, ballast and shingles supplied and delivered; also ready-mixed concrete.

ST. IVES SAND AND GRAVEL CO., LTD., 22 The Broadway, St. Ives, Hunts. (Tel.: St. Ives 2441/2/3/4.) (See Huntingdonshire for details.)

STANWAY CONTRACTS LTD., Upper Edwards Hall, Eastwood, Southend-on-Sea. (Tel.: Eastwood 55161.) Sand and gravel pits at Rochford and Woodham Walter. Graded aggregates supplied or delivered.

WELFORD GRAVELS LTD., Head Office: Goldington, Bedford. (Tel.: 4587/8/9.) Washed and graded aggregates. Local stone and pits: Tillingham 287.

WIVENHOE SAND, STONE AND GRAVEL CO., LTD., Wivenhoe, Essex. (Tel.: Wivenhoe 231.) High-quality washed aggregates of all grades.

DERBYSHIRE

HULLAND GRAVEL CO., LTD., Cheddie, Stoke-on-Trent. (Tel.: Cheddie 2323/4, 2119 and 2195.) Manchester Office: Hardy's Buildings, 3 Cateaton Street, Manchester. (Tel.: Blackfriars 2277/8.)

SALISBURY AND WOOD, LTD., Matlock. (Tel.: 272/273.) Limestone and granite, sand, gravel and aggregate, kerbs, slabs, blocks, posts, reconstructed and natural stone; lime and ground limestone. Lightweight aggregates, ashes, red shale.

DEVONSHIRE

PLUMPTON TRADING CO., LTD., Marsh Mills, Plympton, Plymouth. (Tel.: Plympton 2361.) Washed and graded sands for all purposes. Special sands to B.S.S. Precast concrete.

DORSET

BULL BROS. S. AND L., LTD., 126A High Street, Winchester. (Tel.: 2264.) (See Hampshire.)

DANGERFIELD, F. J. AND CO., LTD., 261A Finchley Road, London, N.W.3. (Tel.: Hampstead 8044/8.)

For all road aggregates, kerbs, sets. (See London.)

DOCTON LINTONSTONE LTD., Bumper Lane, Easton, Portslade, Dorset. (Tel.: Portslade 2207/8/9.) Portland and bituminous macadam, foundation material, limestone for all purposes and to all gradings. Portland stone aggregates and Portland capstone aggregates for reconstructed stone. By road and sea.

GILSON, S. C. AND SONS, LTD., Holcombe, near Bath. (Tel.: St. Sampson-on-the-Frome 243.)

HALL AND CO., LTD., 8 Commercial Road, Parkstone. (Tel.: 5379.)

MOREYS (VERWOOD), LTD., Verwood, Wimborne, Dorset. (Tel.: Verwood 234.) Concrete aggregates, building sand, bone, path gravel.

DURHAM

BULL BROS. S. AND L., LTD., 126A High Street, Winchester. (Tel.: 2264.) (See Hampshire.)

DANGERFIELD, F. J. AND CO., LTD., 261A Finchley Road, London, N.W.3. (Tel.: Hampstead 8044/8.)

For all road aggregates, kerbs, sets. (See London.)

DOCTON LINTONSTONE LTD., Bumper Lane, Easton, Portslade, Dorset. (Tel.: Portslade 2207/8/9.) Portland and bituminous macadam, foundation material, limestone for all purposes and to all gradings. Portland stone aggregates and Portland capstone aggregates for reconstructed stone. By road and sea.

HALL AND CO., LTD., 8 Commercial Road, Parkstone. (Tel.: 5379.)

MOREYS (VERWOOD), LTD., Verwood, Wimborne, Dorset. (Tel.: Verwood 234.) Concrete aggregates, building sand, bone, path gravel.

DURHAM

BRAITHWAITE, A. AND CO., LTD., Knaresborough, Yorks. Quarry at Catterick. (Tel.: Old Catt. 157.) (For details see Yorkshire.)

ESSEX

ALRESFORD SAND AND BALLAST CO., LTD., Alresford Creek, Essex. Colchester, Essex. (Tel.: Wivenhoe 341.) Pits at Alresford Creek, Brightlingsea, Stow-by-the-Sea, Bures and Holland. All grades of washed sand, concreting sand and building sand.

BAKER, F. AND E. LTD., 73 High Road, Rayleigh Essex. (Tel.: Rayleigh 1031/2.) Pits at Great Totham, Heybridge and West Tilbury. All grades of washed material supplied and delivered; also hardcore and ash.

BARDON HILL QUARRIES (ELLIS AND EVERARD), LTD., near Leicester. (Tel.: Coalville 1226/7/8; or London: Norwood Hill 115.) (For data, see Leica.)

BENT-MARSHALL (LEYTON), LTD., 605-607 High Road, Leyton, E.10. (Tel.: Leytonstone 4047/8.) Sand, ballast, brick and concrete hardcore delivered all areas.

DANGERFIELD, F. J. & CO., LTD., 261A Finchley Rd., London, N.W.3. (Tel.: Hampstead 8044/8.)

For all road aggregates, kerbs, sets. (See London.)

FERDERSAND, F. AND CO., LTD., 3000/2. Pits at Orsett, near Stanmore-le-Hope. Upminster. All grades of washed aggregates, plastering and building sands supplied and delivered; also hardcore and ash.

HALL AND CO., LTD., Manory Road, Romford. (Tel.: Romford 4232.) Pits at Avelay, Boreham and Linford, near Grays. Gravel aggregates, concrete, plastering and building sand.

HUNNEDGE, F. A. AND SON, LTD., Rayne Road, Braintree, Essex. (Tel.: Braintree 151 and 151.) Washed and sorted stone 1/2 in. to 10 in.; washed concrete sand and washed soft building sand. Classified sand for asphalt. Pits at Braintree, Bocking, Beales End, Hedingham and Alphamstone.

LEIGH BUILDING SUPPLY CO., LTD., Head Office: 78200, London Road, Leigh-on-Sea, Essex. (Tel.: 78200.) Lined. All grades washed materials, building sand, hardcore, ashes, bricks, granite.

PETERS AND BARMHAM, LTD., 309 South Street, Romford. (Tel.: Romford 44141—7 lines.) Washed and crushed gravel, all sizes; sand. Pits at Ashfield, Chignall St. James, Dagenham, Great Waltham, North Brentwood, North Weald, Thorpe-le-Soken.

READ, P. T. LTD., Foxlands Crescent, Dagenham. (Tel.: Dagenham 6111.) All sands, ballast and shingles supplied and delivered also ready-mixed concrete.

REALFORD, A. LTD., Fairlop, Ilford. Forest Road, Ilford. (Tel.: Ilford 6111/2/3.) High-grade sand, ballast and shingles supplied and delivered; also ready-mixed concrete.

ST. IVES SAND AND GRAVEL CO., LTD., 22 The Broadway, St. Ives, Hunts. (Tel.: St. Ives 2441/2/3/4.) (See Huntingdonshire for details.)

STANWAY CONTRACTS LTD., Upper Edwards Hall, Eastwood, Southend-on-Sea. (Tel.: Eastwood 55161.) Sand and gravel pits at Rochford and Woodham Walter. Graded aggregates supplied or delivered.

WELFORD GRAVELS LTD., Head Office: Goldington, Bedford. (Tel.: 4587/8/9.) Washed and graded aggregates. Local stone and pits: Tillingham 287.

WIVENHOE SAND, STONE AND GRAVEL CO., LTD., Wivenhoe, Essex. (Tel.: Wivenhoe 231.) High-quality washed aggregates of all grades.

GLoucestershire

AMEY'S AGGREGATES, LTD., Lower Wootton, Boars Hill, Oxford. (Tel.: Oxford 35421—10 lines.)

Wash. Hill, Oxford. (Tel.: Sutton 391/3.) All sizes of washed sand and gravel, ready-mixed concrete. Pits at Dry Sandford, near Abingdon, Sutton Courtenay, near Abingdon. (Tel.: Sutton Courtenay 275.)

THEALE, R. LTD., Lordsley, Theale, Berks. (Tel.: Theale 358.) Dorchester, Oxon. (Tel.: Clifton Hampden 236.) Billing, Northampton (Tel.: Cogenhoe 464) for washed and graded aggregates to B.S.S.

BENGHRY AND SONS LTD., Longmoor, Kingsland, Leominster, Herefordshire. (Tel.: Kingsland 301/4.) (See details under Herefordshire.)

COTTON, T. LTD., TENTERDEN, Kent. (Tel.: Tenterden 267.)

Sand, graded gravel aggregates, hardcore, limestone chippings, tarred and bituminous limestone, concrete blocks, fence posts, etc. etc.

CHROMEWELL QUARRIES, LTD., Cromhall, Wotton-under-Edge, Gloucestershire. (Tel.: Cromhall 346/7.) Concrete aggregates, pre-graded in large quantities. Tarred sand, tarmacadam, tarpaving, bituminous macadam and cold asphalt to B.S.S. for hand or machine laying.

GRIFFITHS, A. AND SONS, LTD., Churchdown, Gloucestershire. (Tel.: Churchdown 3135 & 2210.)

Pit, quarry and dredger owners. All grades and types aggregate materials. (Tel.: Churchdown 3135 & 2210.)

Rates for insertion in this GUIDE will be forwarded on application.

CONTRACTORS'

GUIDE TO AGGREGATES

GLOUCESTERSHIRE

HALL AND CO., LTD., Longmoor House, Ashton Vale Road, Bristol, 3. (Tel.: 63001.) Gravel aggregates, concreting, plastering and building sand.

POOLE (LECHLADE), LTD., Gravel Pit, Burford Road, Lechlade, Glos. (Tel.: Lechlade 219.)

TAYLOR, LTD., Wootton Bassett, Swindon. (Tel.: Wootton Bassett 391-5 lines.) (See Wiltshire.)

WHITECLIFF QUARRIES AND BRICKWORKS, LTD., Coleford, Glos. (Tel.: Coleford 3158/9.) Tarred and bituminous limestone macadam, asphalt, concrete aggregates, dolomitic media, engineering, facing and common bricks for all purposes. Delivery road or rail

HAMPSHIRE

AMEY'S AGGREGATES, LTD., Lower Wootton, Roars Hill, Oxford, 3. (Tel.: Oxford 35421-10 lines.) Pits at Dry Sandford, near Abingdon, Sutton Courtenay, near Abingdon. (Tel.: Sutton Courtenay 275.) Theale, near Reading. (Tel.: Theale 358.) Dorchester, Oxon. (Tel.: Clifton Hampden 236.) Billings, Northampton. (Tel.: Cogenhoe 464) for washed and graded aggregates to B.S.S.

BARDON HILL QUARRIES (ELLIS AND EVERARD), LTD., near Leicester. (Tel.: Coalville 1226/7/8; or London: Norwood Hill 115.) (For dets., see L60.)

BUNN BROS., LTD., 126, N.W.3. (Tel.: Hampstead 8044/8.) For all road aggregates, kerbs, sets. (See London.)

GILSON, S. C. AND SONS, LTD., Holcombe, near Bath. (Tel.: Stratton-on-the-Foss 243.)

HALL AND CO., LTD., Balfie, Balfie, Marine Parade, Southampton. (Tel.: Southampton 21234.) and at Portsmouth. Pits at Ringwood, Highbridge and Totton. Gravel aggregate, concreting, plastering and building sand.

HASKINS, G. AND SONS, LTD., Queen Street, Emsworth, washed sand and graded aggregates, path and road gravel, hoggin, cinder, ashes. (Tel.: Emsworth 2693.)

MOREYS (VERWOOD), LTD., Verwood, Wimborne, Dorset. (Tel.: Verwood 234.) Concrete aggregates, building sand, hoggin, path gravel, washed sand, etc.

NEWTON LINTON AND BALSALL CO., LTD., Lymington Road, New Milton, Hants. (Tel.: 37 and 566.) Guaranteed uncrushed, washed, screened and graded concrete aggregates. All sizes. Washed sharp and fine sands.

PRIVETT, W. G. AND SONS, LTD., Drayton Lane, Portsmouth. (Tel.: Cowham 70059.) Concrete aggregates, building sand, hoggin, ashes, washed and graded filter media, etc.

RALPH OF BASINGSTOKE LTD., 37 Kempshot Lane, Basingstoke, Hants. (Tel.: 851.) Concrete aggregates, building sand, path gravel, tarmac, etc.

WHITECLIFF QUARRIES AND GRAVEL CO., LTD., Station Rd., Theale, Reading, Berks. (Tel.: Theale 373.)

WESSEX SAND AND GRAVEL CO., LTD., 126 Hillside Ave., Southampton. (Tel.: 56616.) Pits at Romsey and Fair Oak. Concrete aggregates, hoggin, building sand, etc.

HEREFORDSHIRE

BENRY AND SONS, LTD., Longmoor, Kingsland, Looeminster, Herefordshire. (Tel.: Kingsland 301/4.) Suppliers of all grades of crushed concrete aggregates, road metal, pitching stone, hardcore and coated macadam.

DININGHOR GRAVEL AND STONE CO., LTD., 5A King Street, Hereford. (Tel.: Hereford 5523.) Suppliers of all grades of concrete aggregates, sand, pitching stone and hardcore.

HARPER AND THOMAS, LTD., Bayston Hill Quarry, Shrewsbury. (See Shropshire for details.)

NATIONAL CONCRETE CO., LTD., Presteigne, Radnor. (Tel.: Presteigne 352.) All grades of tarred and bituminous macadam, roadstone, chippings and concrete aggregates, etc.

OLD RADNOR TRADING CO., LTD., Kington. (Tel.: 110.) Granite and limestone aggregates, coated macadam, concrete products.

SALOP SAND AND GRAVEL SUPPLY CO., LTD., Admaston, Wellington. (Tel.: 961.) Salop.

WHITECLIFF QUARRIES AND BRICKWORKS, LTD., Coleford, Glos. (Tel.: 3158/9.) (See Gloucestershire.)

HERTFORDSHIRE

BARDON HILL QUARRIES (ELLIS AND EVERARD), LTD., near Leicester. (Tel.: Coalville 1226/7/8; or London: Norwood Hill 115.) (For dets., see L60.)

BANGERFIELD, F. J. AND CO., LTD., 261A Finchley Road, London, N.W.3. (Tel.: Hampstead 8044/8.) For all road aggregates, kerbs, sets. (See London.)

OLDWOODS SALES, LTD., Eastwood House, City Road, E.C.1. (Tel.: Clerkenwell 2040.) Luxembourg pit, (Tel.: Luxembourg 2040.) Producers and distributors of all grades of washed aggregates.

GABRIEL, C. LTD., Palmers Lane, Enfield, Middx. (Tel.: HOWARD 4351/2/3.) Washed aggregates and building sand. Pits at Herford and Enfield.

HALL AND CO., LTD., Railway Yard, Orchard Road, Stevenage. (Tel.: 775.) at Hatfield. Gravel aggregates, concreting, plastering and building sand.

ST. IVES SAND AND GRAVEL CO., LTD., 22 The Broadway, St. Ives, Hunts. (Tel.: St. Ives 2441/2/3/4.) (See Huntingdonshire for details.)

WEED, G., CAMBRIDGE, 35 Martrah Avenue, Cambridge. (Tel.: 3669/4535.) (See Cambridge.)

WINFIELD, HENRY, LTD., Pix Farm Lane, Hemel Hempstead. (Tel.: Berkhamsted 1208/9.) Pits at Watford, Leighton Buzzard, Heath and Reach, and Bedford.

HUNTINGDONSHIRE

BARDON HILL QUARRIES (ELLIS AND EVERARD), LTD., near Leicester. (Tel.: Coalville 1226/7/8; or London: Norwood Hill 115.) (For dets., see L60.)

DANGERFIELD, F. J. AND CO., LTD., 261A Finchley Road, London, N.W.3. (Tel.: Hampstead 8044/8.) For all road aggregates, kerbs, sets. (See London.)

FERRERSAND AGGREGATES, LTD., Northampton Road Quarries, Rushden (2354/5). (See Northants.)

GRAVEL PRODUCTS (HUNTS), LTD., St. Neots, Hunts. (Tel.: St. Neots 123.) Pits at Little Paxton, near St. Neots. (Tel.: St. Neots 308.) Deliveries by road, horse and cart.

NEWE BARGE AND LIGHTER CO., LTD., Market Chambers, Peterborough (Tel.: 5534/5), and Ship End Quarries, Wansford, near Peterborough (Tel.: Wansford 384/5). Roadstone, hardcore, broken stone, ballast, sand, cinders and sand.

ST. IVES SAND AND GRAVEL CO., LTD., 22 The Broadway, St. Ives. (Tel.: St. Ives 2441/2/3/4.) Producers of all grades of washed sand and gravel. Ready mixed concrete. Precast concrete of every description.

WEED, G., CAMBRIDGE, 35 Martrah Avenue, Cambridge. (Tel.: 3669/4535.) (See Cambridge.)

WELFORD GRAVELS, LTD., Head Office: Goldington, Bedford. (Tel.: 4587/8/9.) (See Bedfordshire.)

KENT

BEARTED SAND PITS, Brasted, Kent. (Tel.: 586.) London Office: 10A Elgar Street, S.E.15. (Tel.: New Cross 3373.) Soft and plastering sand, lime and sand-mix, dry, hardcore, S.H. bricks, ashes etc.

BROWN BROS. (SITTINGBOURNE), LTD., Chalkwell, Sittinbgbourne, Kent. (Tel.: Sittinbgbourne 330.) Sand, ballast, shale, hardcore, cinder, breeze blocks, etc.

CLUBB, J., LTD., Dartford, Kent. (Tel.: Dartford 25431.) Pits in North Kent, Medway area and Sevenoaks district. All washed and crushed gravel aggregates, concreting, plastering and building sand.

DIAMOND TREAD CO. (1938), LTD., Ditton Court Quarry, Larkfield, near Maidstone. (Tel.: West Malling 3444.) Quarryowners: tarmacadam, bituminous macadam and dry road stone manufacturers and suppliers. Head Office: 21-22 Old Bailey, London, E.C.4. (Tel.: City 7001-10 lines.)

DIAMOND TREAD CO., LTD., Swan Lane Quarries, Little Chart, Ashford, Kent. Quarry-owners: tarmacadam, bituminous macadam and dry roadstone suppliers. All inquiries to Area Office: Ditton Court Quarry, Larkfield, near Maidstone, Kent. (Tel.: W. Malling 3444.)

HALL AND CO., LTD., Cramond Street, Maidstone (Tel.: Maidstone 51051.) and at Folkestone and Hayes. Pits at Lunsford, near Larkfield. Gravel aggregates, concreting, plastering and building sand. Surecrete pre-mixed concrete.

HARRIS, M. P., AND CO., LTD., Station Road, Paddock Wood, Kent. (Tel.: 185.) (See Sussex.)

TILEYWOOD CONTRACTING AND DREDGING CO., LTD., Post Office, Lee, Maidstone. (Tel.: Maidstone 55401/2/3.) Suppliers of tared, bituminous and dry Kentish ragstone, sea walling, asphalt filters, Scotch granite and kerbing.

LANCASHIRE

BROOMBY'S, LTD., Sandgate, Milnshorpe. (Tel.: 3251/2.) Westmoorland. (See Westmorland.)

BUCKTON QUARRY, Broken stone, all grades. (Tel.: Moseley 123.) Or write Main Road, Oldham.

CASTLEHORN SAND AND GRAVEL QUARRIES, LTD., Trow Lane, Castleton, nr. Rochdale. (Tel.: Castleton 57100.) Lee Quarries, Bacup (Tel.: Bacup 287.) Washed sand, crushed washed stone aggregates; pitching stone.

CROFT GRANITE BRICK AND CONCRETE CO., LTD., West Bank, Widnes. (Tel.: 2656.) "Kubitzed" granite aggregate to B.S.S., tarred and bituminous macadam, cold asphalt, "Crost-matic" Wet Mix, filter media, concrete products.

CROXDEN GRAVEL, LTD., Cheadle, Stoke-on-Trent. (Tel.: Teal 393.) Manchester Office: Blackfriars 3766/7. Plant capacity, 2,000 tons per day.

DUNNING AND SON, LTD. (See Shropshire.)

HARTELEY, JOHN W., LTD., Lundsfield Quarry, Carnforth, Lancs. (Tel.: Carnforth 100.) Large producers of crushed quartz, washed sand, clean washed natural pebble and crushed gravel aggregates for all constructional purposes.

HILTON GRAVEL, LTD., Rice Street, Liverpool Road, Manchester, 3. (Tel.: Densgate 5455 and 5456.) Quarries at Chaddleworths. (Tel.: Tean 241.) And at Lathom, Cheshire. (Tel.: Longton 3196.)

HULLAND GRAVEL CO., LTD., 12, The Green, St. Albans, Herts. (Tel.: 2233/4, 2119 and 2195.) Manchester Office: Hardy's Buildings, 3 Cateaton Street, Manchester, 3. (Tel.: Blackfriars 2277/8.)

PENMAENMAWR AND WELSH GRANITE CO., LTD., all sizes and gradings of crushed granite aggregate. Immediate delivery ex stock.

ROUND-O QUARRIES, LTD., Heleby Street, Warrington. (Tel.: 5451-4 lines.) Building and concrete sand and shale.

TERN HILL SAND AND GRAVEL CO., LTD., Almington Quarries, near Market Drayton, Staffs. (Tel.: Hales 261/2/3.) (See Shropshire for details.)

FRENTHORN GRAVEL CO., LTD., Lordships Quarries, Wilmotbridge, near Market Drayton. Salop. (Tel.: 094/5-215-3 lines.)

CROFT GRANITE, BRICK AND CONCRETE CO., LTD., 128-136 High Street, Edwars, Middlesex. (Tel.: Edwars 0076/7 and 1246.) "Kubitzed" granite aggregate to B.S.S., tarred and bituminous macadam, cold asphalt, "Crost-matic" Wet Mix, filter media, concrete products.

DANGERFIELD, F. J. AND CO., LTD., 261A Finchley Road, N.W.3. (Tel.: Hampstead 8044-8.) Granite, limestone or slag, coated or dry, all sizes and pitching granite kerb and sets, felspar quartz and other minerals by road or rail or ex-London stock.

DONCASTER MINERALS, LTD., Bumpers Lane, Easton, Portland, Dorset. (Tel.: Bumpers 2207/8.) (See details see Dorset.)

DRINKWATER, W. W. (WILLESDEN), LTD., Dudden Hill Lane, Willesden, N.W.10. (Tel.: GLADstone 6400/5.) Pits: Rus Green, Denham, Ricks. (Tel.: Denham 2241/3, 31.) Head Office: Road to Hounslow Middlesex. (Tel.: Hounslow 6223/3.)

GABRIEL, C. LTD., Palmers Lane, Enfield, Middlesex. (Tel.: HOWARD 4351/2/3.) Washed aggregates and building sand. Pits at Enfield and Herford.

HALL AND CO., LTD., Chantrey House, Ecclesfield, S.W.9. (Tel.: Shire 7122.) Sand, ballast, shale, Durich, Poplar and Wansbeck. Gravel aggregates, concreting, plastering and building sand.

KEEN, W. J., AND SONS, 18 Granville Road, Epping, Essex. (Tel.: Epping 2120.) All sands, ballast, shingle and hardcore supplied.

LONDON BALKERS, LTD., 10, Newgate, E.C.2. (Tel.: Paddington 5064, 554.) Porchester Terrace North, Paddington, W.2.

READ, F. T., LTD., Downs Works, Ambleside, Terrace, Hackney, E.8. (Tel.: Clissold 6971/2.) All sands, ballast and shingles supplied and delivered; also ready mixed concrete. Pits: Fairlop Airfield, Forest Road, Ilford, Essex. (Tel.: 6161/2/3.)

ROADSIDE CONSTRUCTION, 1934, LTD., Stockley Lane, West Drayton, Middlesex. (Tel.: West Drayton 3041.) All sizes broken limestone, dry and coated to British Standards.

LEICESTERSHIRE

WANLIP GRAVELS, LTD., Wanlip, Road, Swan, Leicester. Any size or grading, scientifically graded, ballast, All to B.S.S. (Tel.: Swan 2327 and 2797.)

WELFORD GRAVELS, LTD., Head Office: Goldington, Bedford. (Tel.: 4587/8/9.) (See Northamptonshire.)

WREAKE VALLEY GRAVELS CO., LTD., Melton Mowbray. (Tel.: Pits-Rotherby 205 or head office Melton 2488.) All grades washed aggregates and sand.

LINCOLNSHIRE

BULLIMORE SAND AND GRAVEL, LTD., Bon Witham, Grantham. (Tel.: Thistleton 223.) Building sand, hardcore, ashes. All grades washed and aggregates.

BURGOYNE BROTHERS (EXCAVATIONS), LTD., Market Place, Clumber, West, Baslow, Chesterfield. (Tel.: 7130.) (For details, see Derbyshire.)

CONINGSBY SUPPLY CO., LTD., Registered Office: The Broadway, Woodhall Spa, Lincs. (Tel.: Woodhall 3150.) Screened limestone, hardcore, pitching, filling, flint, hoggin. Ex-quarry or delivered.

DOWN-MAC SUPPLY LTD., LTD., Tallington, Stamford. (Tel.: 2100.) Graded washed sand and gravel.

EAST MIDLAND BUILDERS SUPPLY CO., LTD., 21 Castleby West, Barton-on-Humber, Lincs. (Tel.: 2189.) All grades washed sand and gravel, roadstone, hardcore, washed silica sand.

GIBSONS LTD., Market Deeping, 332/2383. Pits at Langtoft, near Peterborough. (Tel.: Market Deeping 2218.) All grades washed sand and aggregates.

HARTSHOLME GRAVEL AND SAND CO., LTD., Hartsholme Wood, Doddington Road, Lincoln. Soil treatments. (Tel.: Hartsholme Sales 3391.) 17 West Parade, Lincoln. (Tel.: Lincoln 2339.)

HOVERINGHAM GRAVELS LTD., Hoveringham, Nottingham. (Tel.: Lowdham 3171-15 lines.) (For details, see Nottinghamshire.)

PETERBOROUGH QUARRIES, LTD., Sandymoor, Market Deeping, Peterborough. (Tel.: Market Deeping 2355-3 lines.) Quarry all sizes. All grades of hardcore and broken stone. (See also Northamptonshire.)

POLLARD, C. AND SON (TALLINGTON), LTD., Walk House, Langtoft, Peterborough. Pits at Tallington, near Stamford, Lincoln. (Tel.: Marks Deeping 2140.) All grades washed sand and gravel aggregates. For "Supercrete" ready mixed concrete.

TRENTFIELD GRAVELS, LTD., Head Office: Deansgate, Grimsby. (Tel.: Grimsby 5354.) Washed and graded gravel and sand, roadstone, hardcore, slag, tarmac, ashes, etc. Pits and quarries throughout the county.

LONDON

BARDON HILL QUARRIES (ELLIS AND EVERARD), LTD., near Leicester. (Tel.: Coalville 1226/7/8; or London: Norwood Hill 115.) (For dets., see L60.)

COX, H. AND SONS, LTD., 33 Southampton Way, Southampton. S.E.5.

CROFT GRANITE, BRICK AND CONCRETE CO., LTD., 128-136 High Street, Edwars, Middlesex. (Tel.: Edwars 0076/7 and 1246.) "Kubitzed" granite aggregate to B.S.S., tarred and bituminous macadam, cold asphalt, "Crost-matic" Wet Mix, filter media, concrete products.

DANGERFIELD, F. J. AND CO., LTD., 261A Finchley Road, N.W.3. (Tel.: Hampstead 8044-8.) Granite, limestone or slag, coated or dry, all sizes and pitching granite kerb and sets, felspar quartz and other minerals by road or rail or ex-London stock.

DONCASTER MINERALS, LTD., Bumpers Lane, Easton, Portland, Dorset. (Tel.: Bumpers 2207/8.) (See details see Dorset.)

DRINKWATER, W. W. (WILLESDEN), LTD., Dudden Hill Lane, Willesden, N.W.10. (Tel.: GLADstone 6400/5.) Pits: Rus Green, Denham, Ricks. (Tel.: Denham 2241/3, 31.) Head Office: Road to Hounslow Middlesex. (Tel.: Hounslow 6223/3.)

GABRIEL, C. LTD., Palmers Lane, Enfield, Middlesex. (Tel.: HOWARD 4351/2/3.) Washed aggregates and building sand. Pits at Enfield and Herford.

GRUNDON, S. LTD., 59 Hartington Road, Hillington, Middlesex. (Tel.: 4156.) Sand, ballast, shingle, hardcore, ashes. Excavation and demolition.

HALL AND CO., LTD., Chantrey House, Ecclesfield Street, S.W.1. (Tel.: Sloane 7122.) and at Ashford and Brentford. Pits at Bedford, near Feltham. Gravel aggregates, concreting, plastering and building sand.

JONSON BALLAST CO., LTD., (Tel.: Paddington 5064, 554.) Porchester Terrace North, Paddington, W.2.

STUART MACEY, LTD., Gordon Road, High Wycombe. (Tel.: High Wycombe 2591/2.)

THAMES SAND AND GRAVEL CO., LTD., Fordbridge Road, Shepperton. (Tel.: Walton-on-Thames 23616.) Gravel aggregates, concreting, plastering and building sand.

WINDSORY SAND AND GRAVEL CO., LTD., 21 New Walk, Leicester. (Tel.: 2666.) Quarry at Montmorel, near Loughborough. (Tel.: Winstanley 164.) Gravel aggregates, concreting, plastering and building sand.

WINDSORY SAND AND GRAVEL CO., LTD., Pitts at Winstanley. (Tel.: Winstanley 164.) Gravel aggregates, concreting, plastering and building sand.

MERIONETHSHIRE

SALOP SAND AND GRAVEL SUPPLY CO., LTD., Admaston, Wellington. (Tel.: 961.) Salop.

MIDDLESEX

CROSS, GEO. C. AND CO., LTD., Ironbridge, Uxbridge Road, Southall. (Tel.: Southall 2264/5/6.) Sand, ballast, shingle, hardcore, ashes.

DRINKWATER, W. W. (WILLESDEN), LTD., Staines Rd., Hounslow Hts., Middx. (Tel.: Hounslow 6223/3.)

GABRIEL, C. LTD., Palmers Lane, Enfield, Middlesex. (Tel.: HOWARD 4351/2/3.) Washed aggregates and building sand. Pits at Enfield and Herford.

GRUNDON, S. LTD., 59 Hartington Road, Hillington, Middlesex. (Tel.: 4156.) Sand, ballast, shingle, hardcore, ashes. Excavation and demolition.

HALL AND CO., LTD., Chantrey House, Ecclesfield Street, S.W.1. (Tel.: Sloane 7122.) and at Ashford and Brentford. Pits at Bedford, near Feltham. Gravel aggregates, concreting, plastering and building sand.

JONSON BALLAST CO., LTD., (Tel.: Paddington 5064, 554.) Porchester Terrace North, Paddington, W.2.

STUART MACEY, LTD., Gordon Road, High Wycombe. (Tel.: High Wycombe 2591/2.)

THAMES SAND AND GRAVEL CO., LTD., Fordbridge Road, Shepperton. (Tel.: Walton-on-Thames 23616.) Gravel aggregates, concreting, plastering and building sand.

WINDSORY SAND AND GRAVEL CO., LTD., Pitts at Winstanley. (Tel.: Winstanley 164.) Gravel aggregates, concreting, plastering and building sand.

CONTRACTORS' GUIDE TO AGGREGATES

MID-WALES

BENGY AND SONS, LTD., Longmoor, Kingsland, Leominster, Herefordshire. (Tel.: Kingsland 301/4.) (See details under Herefordshire.)
ELLESMER SAND AND GRAVEL CO., LTD., Wood Lane, Ellesmere, Salop. (Tel.: Ellesmere 167.) (For details, see Shropshire.)
HARPER AND THOMAS, LTD., Bayton Hill Quarry, Shrewsbury. (See Shropshire for details.)
NASH ROCKS STONE AND LIME CO., LTD., Presteigne, Herefordshire. (Tel.: Presteigne 352.) (See details under Herefordshire for details.)
OLD RADNOR TRADING CO., LTD., Querries in Radnorshire. (Tel.: Kingston 11.) (See Herefordshire.)
SALOP SAND AND GRAVEL SUPPLY CO., Admaston, Wellington. (Tel.: 961.) Salop.
TERN HILL SAND AND GRAVEL CO., LTD., Alminham Quarries, near Market Drayton, Staffs. (Tel.: Hales 261/2/3.) (See Staffordshire for details.)

MONMOUTHSHIRE

IN-SITU CONCRETE, LTD., Victoria Works, Ebbw Vale (Tel. 3032) and Phoenix Works, Cardiff (Rhimbina 2360) for limestone and slag aggregates, ready-mixed concrete, tarmacadam, media, filling, etc., kerbs and pavings.
MONMOUTHSHIRE ASSOCIATED QUARRIES, LTD., Head Office: 38 Chepstow Road, Newport. Mon 944. Nework 3811/2. Suppliers of all grades of concrete aggregates, road metal, pitching stone, tarmacadam and bituminous macadam in limestone, dolomite and blue pennant stone. Quarries throughout the county.
WHITEHORN QUARRIES AND BRICKWORKS, LTD., Colford, Glos. (Tel. 3158/9/10.) (See Gloucestershire.)

MONTGOMERYSHIRE

HARPER AND THOMAS, LTD., Bayton Hill Quarry, Shrewsbury. (See Shropshire for details.)
NASH ROCKS STONE AND LIME CO., LTD., Presteigne, Radnor. (Tel.: Presteigne 352.) (See Herefordshire for details.)
SALOP SAND AND GRAVEL SUPPLY CO., Admaston, Wellington. (Tel.: 961.) Salop.

NORFOLK

BARDON HILL QUARRIES (ELLIS AND EVERARD), LTD., near Leiston. (Tel.: Coalville 1226/7/8; or London: Norwood Hill 115.) (For details, see Leics.)
FRECKENHAM GRAVEL CO., LTD., The Brook, Sutton, Ely, Cambs. (Tel.: Sutton 391/3.) Washed sand and gravel. Pit: Feltwell.
JOHNSON, F. C. LTD., Station Road, Terrington St. Clement, near Kings Lynn. (Tel.: Terrington St. Clement 248.) Washed and screened gravel, roadstone, washed shingle and fine sands.
THORPE GRAVEL PITS, LTD., Harvey Lane, Norwich. (Tel.: Norwich 332434.) Washed and graded aggregates, stone and gravel delivered to all parts of Norfolk and Suffolk.

NORTHAMPTONSHIRE

AMEY'S AGGREGATES, LTD., Lower Wootton, Boars Hill, Oxford. (Tel.: Oxford 35421-10 lines.) Pits at Dry Sandford, near Abingdon. Sutton Courtney, near Abingdon. (Tel.: Sutton Courtney 275.) Theale, near Reading. (Tel.: Theale 358.) Dorchester, Oxon. (Tel.: Clifton Hampden 236.) Billing, Northampton. (Tel.: Cogenhoe 464) for washed and graded aggregates to B.S.S.

BARDON HILL QUARRIES (ELLIS AND EVERARD), LTD., near Leicester. (Tel.: Coalville 1226/7/8; or London: Norwood Hill 115.) (For details, see Leics.)
SCESTER STONE CO., LTD., Stratton Audley, Bicester, Oxon. (Tel.: Stratton Audley 238.) Manufacturers and suppliers of all grades limestone tarmacadam, dry, pitching stone, hardcore, etc.
BILLING GRAVEL CO., LTD., Station Road, Billing, Northampton. (Tel.: Cogenhoe 219.) London office: 23 Berkeley Square, W.1. (Tel.: Mayfair 6341.)
BRAYBROOK, E. W. LTD., Newton Road, Higham Ferrers. (Tel.: Higham 3344 and 3345.) All grades of washed and graded aggregates to B.S.S. Building sand, hardcore.

DANGERFIELD, F. J., AND CO., LTD., 261A Finchley Road, London, N.W.3. (Tel.: HAMPstead 8044/5.) For all road aggregates, kerbs, etc. (See London.)
DOWNAC (PRODUCTS) LTD., Tallington, Stamford. (Tel.: Market Deeping 2301.) All grades of washed sand and gravel.

DUSTON STONE QUARRIES, LTD., New Duston, Northampton. (Tel.: Brixworth 278 and 298; Duston 503.) Producers of building and walling stone, roadstone, hardcore, broken stone, ashes, sand, gravel and hoggins. Immediate delivery throughout Northamptonshire.

FERRELLS AGGREGATES, LTD., Northampton Road Quarries, Rushden, Northants. (Tel.: Rushden 233/5/3.) Largest producers in the county. All grades of high-quality concrete aggregate to B.S.S. Delivers throughout Northamptonshire and adjoining counties.

GIBBONS, F. B. AND SONS, LTD., Welby House, Market Deeping, Peterborough. (Tel.: Deeping 321/338.) Limestone. (For details.)
HOVERINGHAM GRAVEL CO., LTD., Hoveringham, Nottingham. (Tel.: Lowdham 3171-15 lines.) (For details, see Nottinghamshire.)

KETTON STONE CO. (Prop. Andrew's Garage), Ketton, near Stamford. (Tel.: Ketton 206.) Hardcore, roadstone, crushed stone, top soil, silica clay. Quarries at Ketton.

NEKE BARGE AND LIGHTER CO., LTD., Market Chambers, Peterborough (Tel. 5534/5) and Ship End Quarries, Wansford, near Peterborough. (Tel.: Wansford 39/51.) Washed, hardcore, broken stone, ballast, sand, silica clay and sand.

NEWARK (PETERBOROUGH) SAND AND GRAVEL CO., LTD., 127 Eastfield Road, Peterborough. (Tel.: Peterborough 2091.) All grades washed and screened sand and gravel.

PETERBOROUGH QUARRIES, LTD., Sandylands, Maxey, Peterborough. (Tel.: Market Deeping 2355-3 lines.) Eight quarries supplying all grades of hardcore and broken stone. Also Wettins at Yarwell, Wansford. All grades gravel, sand, top soil, silica clay.

POLLARD, C. AND SON (TALLINGTON), LTD., Walk House, Langtoft, Peterborough. (Tel.: Market Deeping 2140.) (See Lincolnshire for details.)

WELFORD GRAVELS, LTD., Head Office: Goldington, Bedford. (Tel.: 4587/8/9.) Largest producers of all grades of washed aggregates in Northamptonshire and Bedfordshire. Regular deliveries anywhere. Local office and pits: Portly Ford. (Tel.: Welford 256.)

NORTH WALES

CAWOOD, WHARTON AND CO., LTD., Pistyll Gwyn Quarry, Llanarmon, near Mold. (Tel.: Llanarmon-yn-Yal 27.) Crushed limestone and tarmacadam. All grades.

NORTH WALES

CHESHIRE AND NORTH WALES TARRED MACADAM CO., LTD., Llanarmon, near Mold. (Tel.: Llanarmon-yn-Yal 43.) Hard, broken limestone, dry and coated to B.S.S. Inquiries to Manager, Office - Market Chambers, Tower Street, Tunstall, Stoke-on-Trent. (Tel.: Stoke-on-Trent 3904.)
ELLESMER SAND AND GRAVEL CO., LTD., Wood Lane, Ellesmere, Salop. (Tel.: Ellesmere 167.) (For details, see Shropshire.)
HARPER AND THOMAS, LTD., Bayton Hill Quarry, Shrewsbury. (See Shropshire for details.)
NASH ROCKS STONE AND LIME CO., LTD., Presteigne, Herefordshire. (Tel.: Presteigne 352.) (See Herefordshire for details.)
OLD RADNOR TRADING CO., LTD., Querries in Radnorshire. (Tel.: Kingston 11.) (See Herefordshire.)
SALOP SAND AND GRAVEL SUPPLY CO., Admaston, Wellington. (Tel.: 961.) Salop.
TERN HILL SAND AND GRAVEL CO., LTD., Alminham Quarries, near Market Drayton, Staffs. (Tel.: Hales 261/2/3.) (See Staffordshire for details.)

NOTTINGHAMSHIRE

BARDON HILL QUARRIES (ELLIS AND EVERARD), LTD., near Leiston. (Tel.: Coalville 1226/7/8; or London: Norwood Hill 115.) (For details, see Leics.)
BURROWS BROTHERS (EXCAVATIONS), LTD., Market Place Chambers, West Bar, Chesterfield. (Tel.: 7130.) (For details, see Derbyshire.)
GLASS QUARRIES (T. C. CAMPBELL), LTD., Rotherham. (Tel.: Rotherham 5223.) Crushed and graded stone, concrete, sand, building sand, plastering sand and crushed gravel; could be collected ex-quarry or delivered.
GUNTHORPE GRAVELS (1958), LTD., (Tel.: Notting 77357.) and Woods. (Tel.: Coalville 2131.) (An associate company of T. C. Campbell.) All grades washed gravel and sand to B.S.S.
HOVERINGHAM GRAVEL CO., Hoveringham, Nottingham. (Tel.: Lowdham 3171-15 lines.) Quarries at Hoveringham, Holme, Pierrepont Colliery, Blidworth and Newark. All grades washed gravel and sand to any specification. Crushed quartz for surface dressing of roads a specialty. Plant capacity 9,000 tons per day.
NEWARK GRAVEL AND CONCRETE CO., LTD., Grove Street, Newark. (Tel.: Newark 401.) All grades washed sand and aggregates.
SALSBURY AND WOOD, LTD., Matlock. (Tel.: 272/273.) (For details see Derbyshire.)

OXFORDSHIRE

AMEY'S AGGREGATES, LTD., Lower Wootton, Boars Hill, Oxford. (Tel.: Oxford 35421-10 lines.) Pits at Dry Sandford, near Abingdon. Sutton Courtney, near Abingdon. (Tel.: Sutton Courtney 275.) Theale, near Reading. (Tel.: Theale 358.) Dorchester, Oxon. (Tel.: Clifton Hampden 236.) Billing, Northampton. (Tel.: Cogenhoe 464) for washed and graded aggregates to B.S.S.

BARDON HILL QUARRIES (ELLIS AND EVERARD), LTD., near Leicester. (Tel.: Coalville 1226/7/8; or London: Norwood Hill 115.) (For details, see Leics.)
SCESTER STONE CO., LTD., Stratton Audley, Bicester, Oxon. (Tel.: Stratton Audley 238.) Manufacturers and suppliers of all grades limestone tarmacadam, dry, pitching stone, hardcore, etc.

CURTIS, J. AND SONS LTD., Botley Works, Oxford. (Tel.: 41081/2/3.) Sand and all grades of washed and graded aggregates at Radley, near Abingdon. (Tel.: Abingdon 441.)

DANGERFIELD, F. J., AND CO., LTD., 261A Finchley Road, London, N.W.3. (Tel.: HAMPstead 8044/5.) For all road aggregates, kerbs, etc. (See London.)

DIX, G. H. AND SON, LTD., Freeland, Oxon. (Tel.: Freeland 234.)

DUSTON STONE QUARRIES, LTD., New Duston, Northampton. (Tel.: Brixworth 278 and 298; Duston 503.) Producers of building and walling stone, roadstone, hardcore, broken stone, ashes, sand, gravel and hoggins. Immediate delivery throughout Northamptonshire.

FERRELLS AGGREGATES, LTD., Northampton Road Quarries, Rushden, Northants. (Tel.: Rushden 233/5/3.) Largest producers in the county. All grades of high-quality concrete aggregate to B.S.S. Delivers throughout Northamptonshire and adjoining counties.

GIBBONS, F. B. AND SONS, LTD., Welby House, Market Deeping, Peterborough. (Tel.: Deeping 321/338.) Limestone. (For details.)
HOVERINGHAM GRAVEL CO., LTD., Hoveringham, Nottingham. (Tel.: Lowdham 3171-15 lines.) (For details, see Nottinghamshire.)

KETTON STONE CO. (Prop. Andrew's Garage), Ketton, near Stamford. (Tel.: Ketton 206.) Hardcore, roadstone, crushed stone, top soil, silica clay.

POLLARD, C. AND SON (TALLINGTON), LTD., Walk House, Langtoft, Peterborough. (Tel.: Market Deeping 2140.) (See Lincolnshire for details.)

WELFORD GRAVELS, LTD., Head Office: Goldington, Bedford. (Tel.: 4587/8/9.) Largest producers of all grades of washed aggregates in Northamptonshire and Bedfordshire. Regular deliveries anywhere. Local office and pits: Portly Ford. (Tel.: Welford 256.)

NOTHLAND

BULLIMORE SAND AND GRAVEL LTD., South Witham, Grantham, Lincs. (Tel.: Thaxleton 223.) Building sand, hardcore, ashes. All grades washed sand and aggregates.

GIBBONS, F. B. AND SONS, LTD., Welby House, Market Deeping, Peterborough. (Tel.: Ketton 206.) (See Lincolnshire for details.)

HOVERINGHAM GRAVEL CO., LTD., Hoveringham, Nottingham. (Tel.: Lowdham 3171-15 lines.) (For details, see Nottinghamshire.)

KETTON STONE CO. (Prop. Andrew's Garage), Ketton, near Stamford. (Tel.: Ketton 206.) Hardcore, roadstone, crushed stone, top soil, silica clay.

PETERBOROUGH QUARRIES, LTD., Sandylands, Maxey, Peterborough. (Tel.: Market Deeping 2355-3 lines.) Quarries at Great Gresham, all grades of broken stone and hardcore. (See also Northamptonshire.)

RUTLAND

CHESHIRE AND NORTH WALES TARRED MACADAM CO., LTD., Llanarmon, near Mold. (Tel.: Llanarmon-yn-Yal 43.) Hard, broken limestone, dry and coated to B.S.S. Inquiries to Manager, Office - Market Chambers, Tower Street, Tunstall, Stoke-on-Trent. (Tel.: Stoke-on-Trent 3904.)

ELLESMER SAND AND GRAVEL CO., LTD., Wood Lane, Ellesmere, Salop. (Tel.: Ellesmere 167.) (For details, see Shropshire.)

HARPER AND THOMAS, LTD., Bayton Hill Quarry, Shrewsbury. (See Shropshire for details.)

NASH ROCKS STONE AND LIME CO., LTD., Presteigne, Herefordshire. (Tel.: Presteigne 352.) (See Herefordshire for details.)

OLD RADNOR TRADING CO., LTD., Querries in Radnorshire. (Tel.: Kingston 11.) (See Herefordshire.)

SALOP SAND AND GRAVEL SUPPLY CO., Admaston, Wellington. (Tel.: 961.) Salop.

TERN HILL SAND AND GRAVEL CO., LTD., Alminham Quarries, near Market Drayton, Staffs. (Tel.: Hales 261/2/3.) (See Staffordshire for details.)

WHITEHORN QUARRIES AND BRICKWORKS, LTD., Colford, Glos. (Tel.: 3158/9/10.) (See Gloucestershire.)

RUTLAND

POLLARD, C. AND SON (TALLINGTON), LTD., Walk House, Langtoft, Peterborough. (Tel.: Market Deeping 2140.) (See Lincolnshire for details.)

SCOTLAND

KEIR AND CAWDER, LTD., Kirkintilloch Road, Bishopbriggs. (Tel.: Bishopbriggs 3200.) All grades washed sand and gravel aggregates.

SHROPSHIRE

BALLIDON QUARRIES, LTD., Ballidon, near Atherstone, Derbyshire. (Tel.: Parwich 201 and 202.) Clean and graded dry limestone to B.S.S. all sizes, coated limestone to B.S. 802 and 1621 and wet-mix; large output, reliable delivery.

BENGY AND SONS, LTD., Longmoor, Kingsland, Leominster, Herefordshire. (Tel.: Kingsland 301/4.) (See details under Herefordshire.)

DUNNING AND SON, LTD., Haughtmond Quarry, near Shropshire. (Tel.: Upton Magna 286/7.) All grades of high-quality roadstone, concrete aggregates and coated macadam. All to B.S.S. Any tonnage available for immediate delivery.

ELLESMER SAND AND GRAVEL CO., LTD., Wood Lane, Ellesmere, Salop. (Tel.: Ellesmere 167.) All grades washed sand, aggregates, concreting and building sands.

HARPER AND THOMAS, LTD., Bayton Hill Quarry, Shrewsbury. (Tel.: Bayton Hill 351.) High quality roadstone, chippings, concrete aggregates, hardcore and coated macadam. Large tonnages always available.

NASH ROCKS STONE AND LIME CO., LTD., Presteigne, Herefordshire. (Tel.: Presteigne 352.) (See Herefordshire for details.)

OLD RADNOR TRADING CO., LTD., Kingston. (Tel.: 11.) (See Herefordshire.)

SALOP SAND AND GRAVEL SUPPLY CO., Admaston, Wellington. (Tel.: 961.) Salop.

TERN HILL SAND AND GRAVEL CO., LTD., Alminham Quarries, near Market Drayton, Staffs. (Tel.: Hales 261/2/3.) (See Staffordshire for details.)

TRENTHAM GRAVEL CO., LTD., Lordship, Quarrington, Willoughbyshire, near Market Drayton, Salop. (Tel.: Pipe Gate 304/5.) All sizes crushed or natural washed gravel. Twice washed sharp concreting sand. Plastering sand. Plant capacity 2,000 tons per day.

SOMERSET

ASHAM QUARRY CO., LTD., Chastey, Frome. (Tel.: Nunney 351.) All sizes block, broken and aggregates. Tared and bituminous macadam. Ex-quarry or delivered.

DANGERFIELD, F. J. AND CO., LTD., 261A Finchley Road, London, N.W.3. (Tel.: HAMPstead 8044/8.) For all road aggregates, kerbs, etc. (See London.)

GILSON, S. C. AND SONS, LTD., Holcombe, near Bath. (Tel.: Stratton 243/43.)

HALL AND CO., LTD., Longmoor House, Ashton Vale Road, Bristol. (Tel.: 63001.) Gravel aggregates, concreting, plastering and building sand.

ROADS RECONSTRUCTION (1934), LTD., Stoneleigh House, Frome. (Tel.: Frome 2361.) All sizes broken limestone dry and coated, to British Standards. Prism concrete products.

WAINWRIGHT, JOHN AND CO., LTD., Shepton Mallet. (Tel.: Shepton Mallet 2366/7.) All sizes basalt, coated basalt, concrete aggregates. Filter media, building blocks and slabs.

SOUTH SCOTLAND

ESK MANUFACTURING CO., LTD., Carlisle. (Tel.: Carlisle 2-4941.) (For details see Cumberland.)

SOUTH WALES

IN-SITU CONCRETE, LTD., Victoria Works, Ebbw Vale (Tel. 3032) and Phoenix Works, Cardiff (Rhimbina 2360) for limestone and slag aggregates, ready-mixed concrete, tarmacadam, media, filling, etc., kerbs and pavings.

PENMAENMAWR AND WELSH GRANITE CO., LTD., 18 Quay Street, Cardiff. (Tel.: 20646/7.) All sizes and gradings of crushed granite aggregate from our Cardiff and Swansea Dock Depots. Dolomite aggregate from Ewenny Quarry, Bridgend. (Tel.: 1165/7.) Coated stone also available.

SESSIONS AND SONS, LTD., West Dock, Cardiff. Producers of coarse and fine aggregate, dredged and graded to British Standards. Branches Newport and Swansea. (Also Gloucester and Hereford.)

SOUTH WALES SAND AND GRAVEL CO., LTD., Head Office: P.O. Box 8, Burrow Buildings, Haverfordwest. (Tel.: Haverfordwest 53071-5 lines.) Sand and gravel merchants, builders' merchants. Penrhyn Quarry owners, silo hardcore, ashes, filling, graded dolomite filter media. Depots: Cardiff, New Quay, Port Talbot, Briton Ferry, Swansea, Llanelli.

STAFFORDSHIRE

BALLIDON QUARRIES, LTD., Ballidon, near Ashbourne, Derbyshire. (Tel.: Parwich 201 and 202.) Clean and graded dry limestone to B.S.S. all sizes, coated limestone to B.S. 802 and 1621 and wet-mix; large output, reliable delivery.

BARDON HILL QUARRIES (ELLIS AND EVERARD), LTD., near Leicester. (Tel.: Coalville 1226/7/8; or London: Norwood Hill 115.) (For details, see Leics.)

CROXDEN GRAVEL, LTD., Chedde, Stoke-on-Trent Staffs. (Tel.: Team 393.) Manchester Office: Blackfriars 3766/7. Plant capacity, 2,000 tons per day.

DUNNING AND SON, LTD., Wood End Gravel Pits, Hedgesford. (Tel.: Hedgesford 302/325.) Washed sand and gravel. All to B.S.S. High-quality roadstone, concrete aggregates and coated macadam from our Haughtmond Quarry, near Shrewsbury. (See Shropshire.)

HARPER AND THOMAS, LTD., Bayton Hill Quarry, Shrewsbury. (See Shropshire for details.)

HILTON GRAVEL, LTD., Chedde, Staffs. (Tel.: Team 241.) Also at Longton, Stoke-on-Trent. (Tel.: Burton 6061)

HULLAND GRAVEL CO., LTD., Chedde, Staffs. (Tel.: Chedde 2323/4, 2119 and 2195.) Manchester Office: Bridgford Buildings, 3 Catherine Street, Manchester. (Tel.: Blackfriars 2277/8.)

RUGLEY GRAVEL CO., LTD., Rugeley Quarries, Rugeley, Staffs. (Tel.: Rugeley 251/2.) Entirely modern plant. Sand classifiers. Finest aggregates to B.S.S. Large output.

CONTRACTORS' GUIDE TO AGGREGATES

STAFFORDSHIRE

SALISBURY AND WOOD, LTD., Matlock. (Tel. 272/273) (For details see Derbyshire.)
SHIRE OAK GRAVELS, LTD., Lichfield Road, Walsall Wood, Staffs. Washed crushed gravel and washed sand. (Tel.: Brownhills 3252.)
TERPS HILL SAND AND GRAVEL CO., LTD., Alington Quarries, near Market Drayton, Staffs. (Tel.: Hales 261/2/3.) Pin sand, concrete sand, and all grades of washed crushed gravel. Hardcore, clinker, ashes and hoggin.

TRENTHAM GRAVEL CO., LTD., Lordships Quarries, Willoughbridge, near Market Drayton, Salop. (Tel.: Pipe Gate 304/5.) All sizes crushed or natural washed gravel. Twice washed sharp concreting sand. Plastering sand. Plant capacity 2,000 tons per day.

SUFFOLK

ALERESEND SAND AND BALLAST CO., LTD., Alereford Creek, near Colchester, Essex. (Tel. 341.) Suffolk and pins at Bures and Stoke-by-Nayland. All grades washed aggregate sand, also hoggin.
BARDON HILL QUARRIES (ELLIS AND EVERARD), LTD., near Leicester. (Tel.: Coalville 1266/7/8; or London: Norwood Hill 115.) (For details see Leicestershire.)
DANCKFIELD, F. J., AND CO., LTD., 201A Fincham Street, London, N.W.1. (Tel.: Hampstead 8044/8.) For all road aggregates, kerbs, setts. (See London.)
DARBY'S SAND AND GRAVEL CO., LTD., Pit at Chippenham Camps (See Camps).
DICKERSON, M., LTD., Tewsham Corner, Newmarket Road, Cambridge. (Tel.: Cam 569/3/4.) (See Camps.)
FRECKENHAM GRAVEL CO., LTD., Pit at Freckenham. (See Camps.)
HALL AND CO., LTD., West End Road, Ipswich. (Tel.: Ipswich 5593/4.) Pits at Keggrave and Homersfield, near Harleston. Gravel aggregates, concreting, plastering and building sand.

MACLAREN BROS. (KENNETT), LTD., station Road, Kennett, Cambs. (Tel.: Kendford 333/4.) (See Camps.)
NT. IVA SAND AND GRAVEL CO., LTD., 22 The Broadway, St. Ives, Hunts. (Tel.: St. Ives 2441/2/3/4.) (See Huntingdonshire for details.)

THORPE GRAVEL PITS LTD., Harvey Lane, Norwich. (Tel.: Norwich 33243/4.) (See Norfolk.)
WEBB, G., CAMBRIDGE, 35 Magrath Avenue, Cambridge. (Tel.: 310/3453.) (See Cambs.)

SURREY

COFF, HARRY A., LTD., Buckhurst Hill, Chesham Ascot, Berks. (Tel. 20627.) (See Berkshire.)
EASTWOOD SALES, LTD., Eastwood House, City Road, E.C.1. (Tel.: Clerkenwell 2040.) Longsides Sand and Ballast Pits, Thorpe, near Esham. (Tel.: Esham 31286.) Suppliers and distributors of all grades of washed aggregates.
GILSON, S. C. AND SONS, LTD., Holcombe, near Bath. (Tel.: Stratton-on-the-Fosse 243.)
HALL AND CO., LTD., Victoria Wharf, Croydon. (Tel.: Croydon 4444.) Other main depots at Coulson, Epsom, Mitcham, Oxhey, Redhill, Tadworth and Woking. Pits at Send and Reigate. Gravel aggregates, concreting, plastering and building sand. Suppliers of pre-mixed concrete.
HARRIS, M. V. AND CO., LTD., Kingston Road, Leatherhead, Surrey (Tel. 3497). (See Surrey.)
JANES AND CO., LTD., 2C Buckingham Avenue, Slough. Sand aggregates, hardcore, ashes, bulldozing and bulk excavation. (Tel.: Slough 20361/2/3.)
LONDON BALLAST CO., LTD., (Tel.: Paddington 5064/55.) 55A Porchester Terrace, North Paddington, W.2.
MARCO (AGGREGATES) LTD., Pit: Norlands Lane, Thorpe, near Esham. (Tel.: Chertsey 3401.) Producers and distributors of high-grade washed sand, shingle, ballast, etc.
MARCO (CROYDON), LTD., Hampton Road, West Croydon. (Tel.: THORNTON Heath 4236/7/8.) All buildings and road aggregates.
WELLS, A. L. AND SON, LTD., Builders' Merchants, Garland Road, Leatherhead (Tel.: 3018/9.) Sand aggregates, hardcore, ashes, cement. Clinker block manufacturers.
WINTON, WM. R., LTD., Send, Woking. (Tel.: Ripley 2454/5.) All grades sand, shingle, ballast, hoggin and ashes. Clinker block manufacturers.

SUSSEX

AVANN, F., Cavendish Avenue, Eastbourne. (Tel.: 4969/70.) Washed and graded ballast, sand, bricks, breeze and concrete blocks, hardcore, clinker, lime, sand and concrete.

DANGERFIELD, F. J., AND CO., LTD., 261A Finchley Road, London, N.W.3. (Tel.: Hampstead 8044/8.) For all road aggregates, kerbs, setts. (See London.)
GILSON, S. C. AND SONS, LTD., Holcombe, near Bath. (Tel.: Stratton-on-the-Fosse 243.)
HALL AND CO., LTD., 16 Chapel Road, Worthing. (Tel.: 2001.) Washed and graded ballast, sand, hardcore, clinker, lime, sand and concrete.

HARRIS, M. P., AND CO., LTD., West station Goods Yard, Bexhill (Tel. 611). Cavendish Place, Eastbourne (Tel. 3800). Dominion Road, Worthing (Tel. 5822). Whitbread Lane, Northiam (Tel. 2211); Station Goods Yard, Haywards Heath (Tel. 1750); Crawley Road, Horsham (Tel. 3366). The Hornet, Chichester (Tel. 4181). All grades aggregates, hardcore, clinker ashes, etc.

WRIGHT, C. AND SONS (BTTON), LTD., 19 Bristol Gardens, Brighton 7. (Tel.: Brighton 63357 and 622-06.) All-in ballast, washed and crushed shingle, sand, ashes, hardcore, chalk, bricks, etc.

WARWICKSHIRE

BALLIDON QUARRIES, LTD., Ballidon, near Ashbourne, Derbyshire. (Tel.: Parwich 201 and 202.) Clean and graded dry limestone to B.S.S., all sizes, coated limestone to B.S. 802 and 1621 and wet-mix, large output, reliable deliveries.

BRUNTINGTHORPE GRAVELS, LTD., Gilmerton, near Rugby. (Tel.: Lutterworth 46.) All sizes gravel aggregates, building and concrete sand to B.S.S. All sizes, locally quarried.

COOPER, J. A. (TRANSPORT), LTD., Hurley, near Atherstone, Warwick. (Tel.: Hurley 225.) Shale pit at Newdigate Colliery, Bedworth, near Coventry. Shale, hardcore and clinker ash as dug or graded. Delivered to site or loaded into customers' own vehicles by arrangement.

DUSTON STONE QUARRIES, LTD., New Duston, Northampton. (Tel.: Brixworth 278 and 298; Duston 515.) (See Northamptonshire.)

HALL AND CO., LTD., Pit at Four Oaks Sutton Coldfield. (Tel.: Four Oaks 356.) Gravel aggregates, concreting, plastering and building sand.

HARKABIN, W. H. AND SONS, LTD., Navigation Bridge, Stone Stanton Road, Coventry. (Tel.: 89439.) All sizes, sandstone, hardcore, kerbs and bags, gravel, sand, ash, setts, etc.

JUDKINS, LTD., Granite Quarries, Tuttie Hill, Nuneaton. (Tel.: Nuneaton 3411-10 lines.) All sizes washed granite aggregate, tarred and bituminous roofs, walls, etc., speciality.

WELFORD GRAVELS, LTD., Head Office: Goldington Bedford (Tel.: 4587/9/9.) (See Bedfordshire and Northamptonshire.)

YEOMANS, G. R., LTD., Oxford Road, Ryton-on-Dunsmore, near Coventry. (Tel.: Coventry, Tollbar 7/8/9.) Shale, hardcore, as dug and graded. Loaded into vehicles or delivered to site.

WESTMORLAND

BROOMBYS, LTD., Sandside, Milnthorpe, Westmorland. (Tel.: Milnthorpe 3251/2.) All grades washed crushed gravel, sand, lime, concrete, granite chippings, pitching, tarmac, rockery, stone, etc.

ESK MANUFACTURING CO., LTD., Carlisle (Tel.: Carlisle 2-4911). For details, see Cumberland.

WILTSHIRE

AMEYS AGGREGATES, LTD., Lower Wootton, Boars Hill, Oxford. (Tel.: Oxford 3543-10 lines.) Pits at Dry Sandford, near Abingdon, Sutton Courtney, near Abingdon (Tel.: Sutton Courtney 275). Theale, near Reading. (Tel.: Theale 358.) Dorchester, Oxon. (Tel.: Clifton Hampden 236.) Billing, Northamptonshire (Tel.: Cogenhoe 464) for washed and graded aggregates to B.S.S.

BULLS BROS. S. AND L., LTD., 126A High Street, Winchester. (Tel.: 2264.) (See Hampshire.)
COKE, T. F. (CHELTENHAM), LTD., 267 Gloucester Road, Cheltenham. (Tel.: 4717/4874.) (See Glos.)

WILTSHIRE

DANGERFIELD, F. J., AND CO., LTD., 261A Finchley Road, London, N.W.3. (Tel.: Hampstead 8044/8.) For all road aggregates, kerbs, setts. (See London.)
GILSON, S. C. AND SONS, LTD., Holcombe, near Bath. (Tel.: Stratton-on-the-Fosse 243.)
MURKYS (VERWOOD), LTD., Verwood, Wimborne, Dorset. (Tel.: Verwood 234.) Concrete aggregates, gravel aggregates, concrete plastering and building sand, lime, coarse precision-mixed concrete.

POOLE (LECHLADE), LTD., Gravel Pit, Burford Road, Lechlade, Glos. (Tel.: Lechlade 219.)
TAYMAC, LTD., Wootton Bassett. (Tel.: 291-3.) Washed and graded aggregates. Washed and screened sand, hoggin and gravel.

WYCOMBE (LECHLADE), LTD., Gravel Pit, Burford Road, Lechlade, Glos. (Tel.: Lechlade 219.)
TAYMAC, LTD., Wootton Bassett. (Tel.: 291-3.) Washed and graded aggregates. Washed and screened sand, hoggin and gravel.

WORCESTERSHIRE

BALLIDON QUARRIES, LTD., Ballidon, near Ashbourne, Derbyshire. (Tel.: Parwich 201 and 202.) Clean and graded dry limestone to B.S.S., all sizes, coated limestone to B.S. 802 and 1621 and wet-mix, large output, reliable deliveries.

BENGRY AND SONS, LTD., Lonsdale, Kingsland, Leominster, Herefordshire. (Tel.: Kingsland 301/4.) (See details under Herefordshire.)

DINMORE GRANITE AND STONE CO., LTD., 5A King Street, Hereford. (Tel.: Hereford 5523.) Suppliers of all grades of concrete aggregates, sand, pitching stone and hardcore.

DUNNING AND SON, LTD., (See Shropshire.)

HARPER AND THOMAS, LTD., Bayston Hill Quarry, Shrewsbury. (See Shropshire for details.)

NASH ROCKS STONE AND LIME CO., LTD., Presteigne, Radnor. (Tel.: Presteigne 352.) (See Herefordshire for details.)

OLD RADNOR TRADING CO., LTD., Kingston (Tel.: 4111.) (See Herefordshire.)

YORKSHIRE

BRAITHWAITE, A. AND CO., LTD., Conyngham Hall, Knaresborough. (Tel.: Knaresborough 2286.) Quarries at Knaresborough (Tel.: Knares 2286) and Catterick (Tel.: Old Catt. 157.) Washed, crushed and graded concrete aggregates to B.S. Specification. Output 2,000 tons daily. Ready mixed mortar and ready mixed concrete also available.

BURTONS BROTHERS (EXCAVATIONS), LTD., Market Place Chambers, West Bar, Chesterfield (Tel.: 7130.) (For details, see Derbyshire.)

DENNIPP, ALAN S., LTD., Kiveton Park, near Sheffield. (Tel.: Kiveton 446/7/8.) Truck-mixed and pre-mixed concrete, washed and crushed gravel, concreting and plastering sand, crushed and graded.

GLEN QUARRIES, LTD., Central Chambers, Wellside, Rotherham. (Tel.: Rotherham 5223.) Crushed and graded stone, concreting sand, building sand, plastering sand and crushed gravel could be collected 24 hours a day.

HOVERINGHAM GRAVEL CO., LTD., Hoveringham, Nottingham. (Tel.: Lowdham 3171-15 lines.) (For details, see Nottinghamshire.)

SALISBURY AND WOOD, LTD., Matlock. (Tel.: 272/1.) For details, see Derbyshire.

SLATER BROS. (WHITELEY), LTD., Whiteley Bridge, near Goole. (Tel.: Whiteley Bridge 300 and 316.) Washed and crushed gravel, stone, natural white stone for crazy paving, terrace walls and house building.

STANLEY FERRY GRAVEL CO., LTD., North Union Building, City Square, Leeds, 1. (Tel.: Leeds 26361.) Washed, crushed and natural graded sand and gravel. Supplies to specification, large daily production. Centre of Yorks. West Riding market area. Wakefield.

WELBECK SAND AND GRAVEL CO., LTD., Parkhill, Wakefield. (Tel.: Wakefield 4454.) Washed sand and gravel.

WEST RIDING GRAVEL CO., NORWICH UNION BUILDINGS, LTD., Norwich Union Buildings, City Square, Leeds, 1. (Tel.: Leeds 23562.) Motors 1,000-ton plant produced sand, gravel and sand.

All aggregates to specification. Contractors Yorks. West Riding to Lancs. border. Pit: Wakefield.

WHITAKER, B. AND SONS, LTD., Eland Road, Leeds. (Tel.: Leeds 75207.) Washed, graded sand and gravel. Supplies to specification.

Quarries at Wakefield, Riga, Masham.

X.L. GRANITE (INGLETON), LTD., Head Office: Clapham, via Lancaster. (Tel.: Clapham 318/9.) Works Tel.: Ingleton 331. All sizes and gradings of Ingleton granite aggregate.

SUBSCRIPTION ORDER FORM

To THE CONTRACT JOURNAL CO., LTD.,
32 SOUTHWARK BRIDGE ROAD, LONDON, S.E.1

Please forward "THE CONTRACT JOURNAL" each week for which
I/we enclose £.....

Name.....
(BLOCK LETTERS)

Full postal address.....
(BLOCK LETTERS)

Occupation/Business.....
(For Readership Classification Purposes Only)

4208

THE INDEX TO DISPLAYED ADVERTISEMENTS WILL BE FOUND ON PAGE 844



IBECO

WATERPROOF PAPER

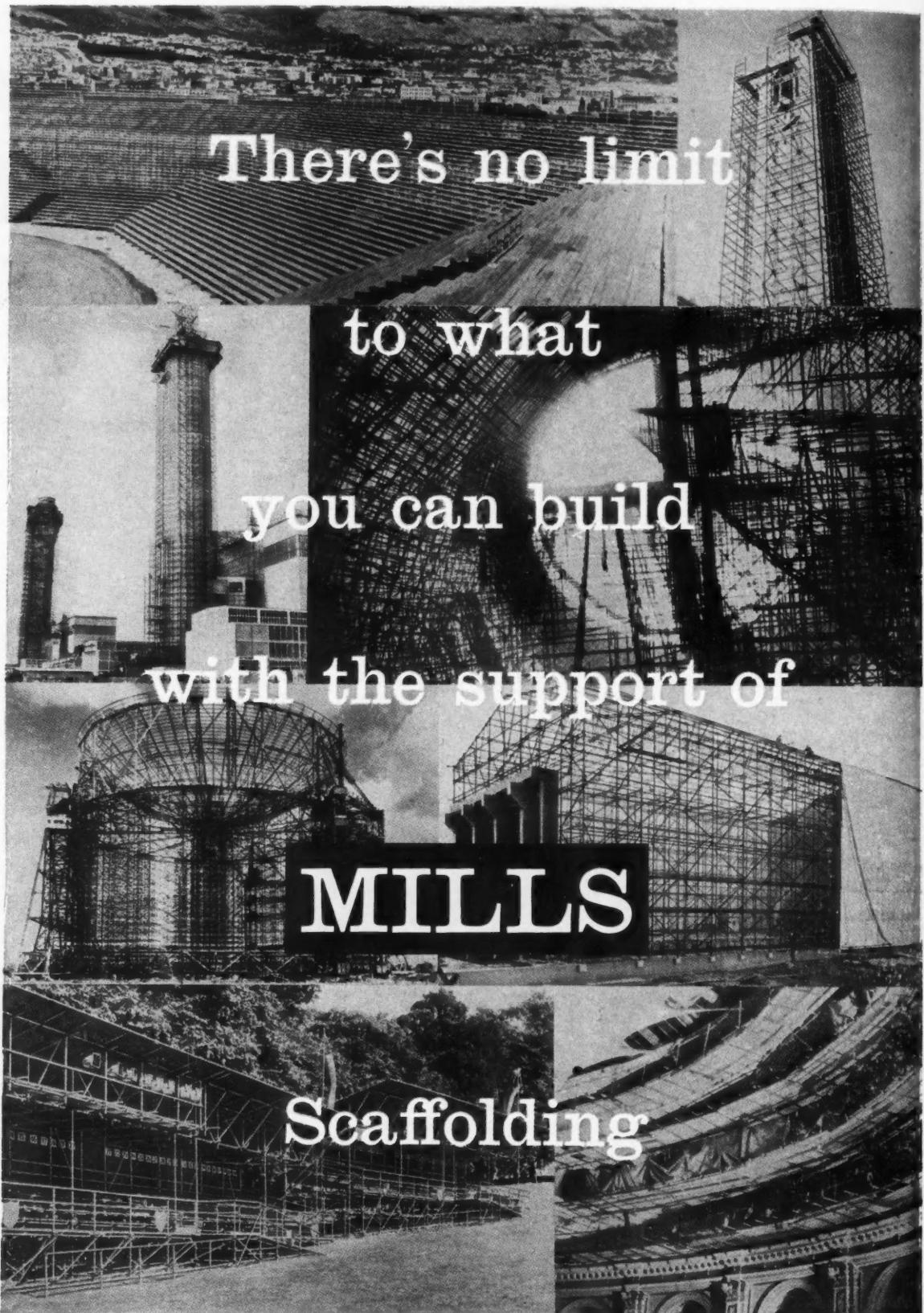
IN CONCRETE ROAD CONSTRUCTION

Recommended qualities for concrete work are IBECO No. 40 to BSS 1521/1949 Class B and IBECO No. 60, the choice depending on the stresses involved. The former fully meets the specification at the lowest possible cost. As well as preventing seepage from the mix IBECO also checks the upward penetration of harmful acids and other chemicals frequently occurring in subsoils. It also has useful applications as a curing overlay. There is no free bitumen in IBECO to sweat out under exposure to hot sun. We will gladly send samples on request.

For the essential retention of water in a concrete mix to ensure sound setting and hardening, careful contractors are more and more depending on IBECO... Like no other waterproof paper, IBECO is waterproof *throughout its texture*. The proofing bitumen is part of the paper itself. Folding, creasing, even heavy trampling will not impair IBECO's impermeability... It's easy and quick to handle—speeds the work as well as lowering its cost and ensuring a better job. Remember IBECO for contracts in hand and in prospect.

DAVIDSONS PAPER SALES LTD.

Head Office: Mugiemoss Mills, Bucksburn, Aberdeen. Liverpool 2. 9 Albion Street, Leeds. 42 Corporation Street, Newcastle-on-Tyne. Branches: 82/84 St. John Street, London, E.C.1. 31 North John Street, Laird Place, Bridgeton, Glasgow, S.E. Boroughloch Square, Edinburgh. 4 Trinity Quay, Aberdeen.



MILLS SCAFFOLD CO. LTD., A subsidiary of Guest, Keen & Nettlefolds, Ltd., Head Office: Trussley Works, Hammersmith Grove, London W.6. (Riverside 3011)



**This
is your
link**

with the fastest and most reliable
service for earthmoving equipment

JACK OLDRING SERVICE

JOU ARE never far from Jack Olding service if you are within reach of a telephone. Call Jack Olding and in a matter of moments the fastest, most reliable service for earthmoving equipment swings into action for you.

Jack Olding service is fast because there are no less than five service depots strategically situated throughout the country. There is bound to be one near you. Each depot maintains a complete range of parts for all equipment. A full 24 hour service is maintained.

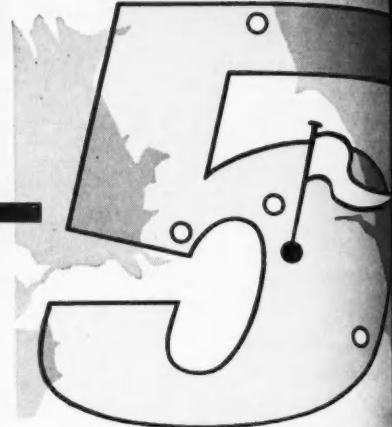
Jack Olding service is reliable because they have trained personnel, the right equipment and the know-how. They handle Britain's most extensive range of the world's finest earthmoving equipment.

For Jack Olding service ring any one of these numbers : **HATFIELD** Hatfield 2333, **WOLVERHAMPTON** Bilston 41731/2, **CARDIFF** Cowbridge 591, **LIVERPOOL** Garston 5101/2, **NEWCASTLE** Newcastle 66-5538/9.

JACK OLDRING & CO. LTD - HATFIELD - HERTS

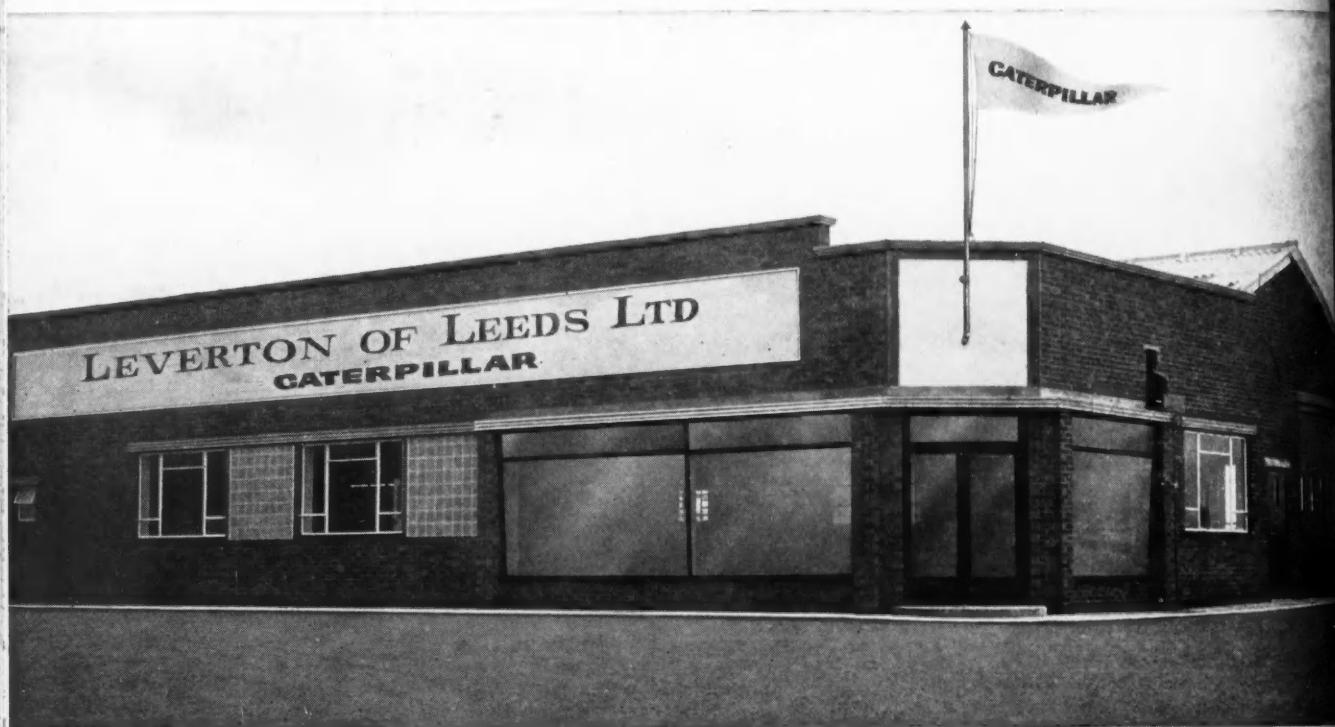
SCOTLAND: Jack Olding & Co. (Scotland) Ltd., Coupar Angus, Perthshire Tel: Coupar Angus 173

NOW THERE ARE -



NEW STREAMLINED LEVERTON DEPOT AT ROTHERHAM IS NOW FULLY OPERATIONAL

Another centre of Leverton service—
equipped to give 100% efficient service
to the Caterpillar Earthmoving Equipment
owner. Caterpillar trained experts
always available to keep all machines
working at peak earning capacity.



This new Depot carries comprehensive stocks of all genuine Caterpillar parts, expertly identified for correct supply and available over the counter or by despatch. Parts assembly exchange units promptly supplied; field and workshop overhauls and track reclamation carried out by Caterpillar trained service engineers; experienced sales engineers are always on hand to advise and quote on the right Caterpillar Equipment for your particular job.
CATERPILLAR plus LEVERTON=PROFIT!

* NEW PARTS FACILITIES

YOUR CATERPILLAR DEALER

* NEW SERVICE FACILITIES

* NEW SALES FACILITIES

THE LEVERTON GROUP OF COMPANIES

SPALDING Spalding, Lincs. Tel: Spalding 3221

LEEDS Gildersome, Leeds. Tel: Morley 4221

NEWCASTLE Team Valley Trading Estate, Gateshead.

Tel: Low Fell 7851

WIGAN

Wigan Rd., Bryn, Ashton-in-Makerfield.

Tel: Ashton-in-Makerfield 7675

ROTHERHAM

Meadow Bank Rd., Rotherham.

Tel: Rotherham 78259

